L Number	Hits	Search Text	DB	Time stamp
1	9923	544/238, 544/296, 544/295, 544/319, 544/333, 544/363, 544/180, 544/237, 544/353, 544/354, 544/356, 544/284, 514/256, 514/259, 514/253.06, 514/253.07, 514/249, 514/263.21, 514/241	USPAT	2002/09/25 16:27
2	272		USPAT	2002/09/25 16:27

m=1

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FILE 'HOME' ENTERED AT 15:21:22 ON 25 SEP 2002

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COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 15:21:30 ON 25 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 24 SEP 2002 HIGHEST RN 454646-45-8 DICTIONARY FILE UPDATES: 24 SEP 2002 HIGHEST RN 454646-45-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> Uploading 099101413rd.str

L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS L1 STR

<09/25/2002

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(10 answer

G1 O,S G2 H,O,S

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 15:21:53 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 9 TO 360
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s ll sss full

FULL SEARCH INITIATED 15:22:04 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 253 TO ITERATE

100.0% PROCESSED 253 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

=> log y

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
140.28
140.49

STN INTERNATIONAL LOGOFF AT 15:22:09 ON 25 SEP 2002

Page 4 09/910,141

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FILE COVERS 1907 - 25 Sep 2002 VOL 137 ISS 13 FILE LAST UPDATED: 24 Sep 2002 (20020924/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 13

L474 L3

=> s 14 and quinoline?

45 L4 AND QUINOLINE?

=> d ibib abs hitstr tot

ANSWER 1 OF 45 CAPLUS COPYRIGHT 2002 ACS 2002:538102 CAPLUS ACCESSION NUMBER:

137:93771 DOCUMENT NUMBER:

Preparation of piperazinocarbonyl(iso) TITLE:

quinolines as 5-HT2A receptor antagonists Boettcher, Henning; Bartoszyk, Gerd; Harting,

INVENTOR(S): Juergen;

Van Amsterdam, Christoph; Seyfried, Christoph

Merck Patent G.m.b.H., Germany PATENT ASSIGNEE(S):

Ger. Offen., 10 pp. SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT	NO.		KI	ND .	DATE			A)	PPLI	CATI	ои ис	o. 1	DATE				
					:							-						
DE	1010	2053		A		2002	0718	$\overline{}$	_ DI	E 20	01-1	0102	053 2	2001	0117			
WO 2002057256 A1						2002	0725		W	20	01-E	P153	11 2	20011224				
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		co.	CR.	CU.	CZ.	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,

Page 5

TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: DE 2001-10102053 A 20010117

OTHER SOURCE(S): MARPAT 137:93771

AB R2COIZZ1R1 (Z = piperazine-1,4-diyl)[I; R1 = (un)substituted Ph, -naphthyl, -heteroaryl; R2 = (un)substituted (iso)quinolyl; Z1 = alkylene]

were prepd. Thus, isoquinoline-1-carboxylic acid was amidated by HZCH2CH2C6H4F-4 to give I (R1 = C6H4F-4, R2 = 1-isoquinolyl, Z1 = CH2CH2).

Data for biol. activity of I were given.

IT 442520-23-2P 442520-24-3P 442520-27-6P 442520-28-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperazinocarbonyl(iso)quinolines as 5-HT2A receptor antagonists)

RN 442520-23-2 CAPLUS

$$\begin{array}{c|c}
 & O & N - CH_2 - CH_2 \\
\hline
 & C - N & F
\end{array}$$

●x HCl

RN 442520-24-3 CAPLUS

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₹1.

RN 442520-27-6 CAPLUS
CN Piperazine, 1-[2-(4-fluorophenyl)ethyl]-4-(2-quinolinylcarbonyl)- (9CI)
(CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{N} & \text{CH}_2 - \text{CH}_2 \\
\hline
 & \text{CH}_2 - \text{CH}_2
\end{array}$$

RN 442520-28-7 CAPLUS
CN Piperazine, 1-[2-(4-fluorophenyl)ethyl]-4-(8-quinolinylcarbonyl)- (9CI)
(CA INDEX NAME)

L5 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:312037 CAPLUS

DOCUMENT NUMBER:

136:325436

TITLE:

Preparation of quinolinylindoles as antimicrobial

agents

INVENTOR(S):

Cuny, Gregory D.; Hauske, James R.; Hoemann, Michael

Z.; Chopra, Ian

PATENT ASSIGNEE(S):

Sepracor Inc., USA

SOURCE:

U.S., 167 pp., Cont. of U.S. Ser. No. 639,622.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION N	0.	DATE
US 6376670	В1	20020423		US 2000-65869	0	20000908
US 6207679	B1	20010327		US 1998-45051		19980319
US 6172084	В1	20010109		US 1998-99640		19980618
US 6103905	Α	20000815		US 1998-21338	5	19981211
PRIORITY APPLN. INFO.	. :		US	1997-878781	В2	19970619
			US	1998-45051	A2	19980319
			US	1998-99640	A2	19980618
			US	1998-213385	A 1	19981211
			US	2000-639622	A2	20000815

OTHER SOURCE(S): MARPAT 136:325436

GI

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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * The title compds. [I; Z = CO, CR2; R = H, alkyl; R5-R8, R14-R17 = H, AΒ halo, alkyl, etc.; R9, R10 = H, alkyl, cycloalkyl, etc.; R3 = H, alkyl; R11 = Η, alkyl; R12 = H, alkyl] which are bactericidal to a Gram-pos. bacterium via a non-lytic mechanism at its MIC (data given), were prepd. E.g., a multi-step synthesis of II, was given. \mathbf{IT} 210698-12-7P 218463-01-5P 218463-13-9P 218463-16-2P 218463-17-3P 218463-19-5P 218463-32-2P 218463-41-3P 218463-49-1P 218463-50-4P 218463-51-5P 218463-52-6P 218463-53-7P 218463-54-8P 218463-55-9P 218463-56-0P 218464-15-4P 275357-17-0P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (prepn. of quinolinylindole derivs. as antimicrobial agents) RN 210698-12-7 CAPLUS CN Piperazine, 1-[[2-(1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 218463-01-5 CAPLUS
CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI)
(CA INDEX NAME)

RN 218463-13-9 CAPLUS

CN Piperazine, 1-[(2-tricyclo[3.3.1.13,7]dec-1-yl-4-quinolinyl)carbonyl]-(9CI) (CA INDEX NAME)

RN 218463-16-2 CAPLUS

CN 1-Piperazineacetic acid, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-.alpha.-oxo-, methyl ester (9CI) (CA INDEX NAME)

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RN 218463-17-3 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-methyl-(9CI) (CA INDEX NAME)

RN 218463-19-5 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN

218463-32-2 CAPLUS
Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-CN (phenylmethyl) - (9CI) (CA INDEX NAME)

RN 218463-41-3 CAPLUS

Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-iodo-4-quinolinyl]carbonyl]-CN (9CI) (CA INDEX NAME)

RN 218463-49-1 CAPLUS

CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

<09/25/2002

RN 218463-50-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

Habte

RN 218463-51-5 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-52-6 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Page 14

RN 218463-53-7 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Habte

RN 218463-54-8 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Page 15

RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-56-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

Habte

RN 218464-15-4 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-chloro-4-quinolinyl]carbonyl]-(9CI) (CA INDEX NAME)

RN 275357-17-0 CAPLUS CN Piperazine, 1-[[7-fluoro-2-(6-fluoro-1H-indol-3-yl)-4-quinolinyl]carbonyl]-(9CI) (CA INDEX NAME)

Page 18 09/910,141

42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT:

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 3 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:240759 CAPLUS

DOCUMENT NUMBER:

136:279469

TITLE:

Preparation of quinoline and quinazoline

derivatives as farnesyl transferase inhibitors for

treatment of tumors and proliferative diseases

INVENTOR(S):

Angibaud, Patrick Rene; Venet, Marc Gaston; Pilatte,

Isabelle Noeelle Constance

PATENT ASSIGNEE(S):

Janssen Pharmaceutica N.V., Belg.

SOURCE:

PCT Int. Appl., 66 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATEN	T	10.		KIND DATE						APPLI	CATI	0.	DATE				
	WO 20	02	0246	82	A1		20020328			,	WO 20	01-E	P108	67	2001	0918		
	W	:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	ΒA	, BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP	, KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK	, MN,	MW,	MX,	MZ,	NO,	ΝZ,	PH,	PL,
	PT, RO					SD,	SE,	SG,	SI,	SK	, SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,
	US, UZ,					YU,	ZA,	ZW,	AM,	ΑZ	, BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM	
	R	W:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	\mathtt{SL}	, SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE	, IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ	, GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
	26	Α	2002	0402		,	AU 20	01-9	3826		20010918							
PRIORITY APPLN. INFO.:										ΕP	2000-	2033	65	Α	2000	0925		
										ΕP	2000-	2000	2033	65A	2000	0925		
										WO	2001-	EP10	867	W	2001	0918		
OTHER	SOUR	CE	(S):			MAR	PAT	136:	2794	69								

OTHER SOURCE(S): MARPAT 136:279469

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$$(R^1)_m$$
 $(R^2)_n$ $C1$ R^3 R^4 $R^5)_q$ $R^5)_q$ $R^5)_q$ R^6 R^6

AB Title compds. I [wherein m and n = independently 0-5; q = 0-3; Y1Y2 = C:N or C:CR9; C9 = H, halo, CN, (cyclo)alkyl, hydroxyalkyl, alkoxy(alkyl), aminoalkyl, (amino)alkenyl, (amino)alkynyl, halocarbonyl, hydroxycarbonyl,

alkoxycarbonyl, aryl, (un)substituted amino or carbamoyl, etc.; R1 and R2=

independently azido, OH, halo, CN, NO2, trihalomethyl, alkoxy, aryloxy, heterocyclyloxy, alkylthio, or (un)substituted (cyclo)alkyl, alkenyl, alkynyl, carbamoyl, amino, sulfamoyl, etc.; or R1R2 = OCH2O, OCH2CH2O, OCH:CH, OCH2CH2, OCH2CH2CH2, CH:CHCH:CH; R3 = H, halo, CN, alkenyl, alkynyl, hydroxycarbonyl, alkoxycarbonyl, aryl, heterocyclyl, alkoxy, alkylthio, (un)substituted (cyclo)alkyl or amino, etc.; R4 = (un)substituted imidazolyl, triazolyl, or pyridyl; R5 = CN, OH, halo, alkenyl, alkynyl, hydroxycarbonyl, alkoxycarbonyl, or (un)substituted (cyclo)alkyl, alkoxy, amino, or carbamoyl, etc.; R7 = halo or (un)substituted (cyclo)alkyl, alkenyl, alkynyl, alkylthio, carboxy, carbamoyl, acyl(amino), etc.; or pharmaceutically acceptable salts, N-oxides, or stereochem. isomeric forms thereof] were prepd. For

N-[2-(3-chlorobenzoyl)-4-(4-chlorobenzoyl)phenyl]acetamide was cyclized with NH3 in i-PrOH to give

(4-chlorophenyl)[4-(3-chlorophenyl)-2-methyl-6-

quinazolinyl]methanone (36%). Addn. of 1-methyl-1H-imidazole in the presence of BuLi and SiEt3Cl in THF afforded II (40%). I have potent farnesyl transferase inhibitory effect and are useful for inhibiting proliferative diseases and growth of tumors expressing an activated ras oncogene (no data).

IT 405549-30-6P, 1-[4-(3-Chlorophenyl)-6-[(4-chlorophenyl)(1-methyl-1H-imidazol-5-yl)methyl]-2-quinolinecarbonyl]-4-methylpiperazine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(farnesyl transferase inhibitor; prepn. of **quinoline** and quinazoline derivs. as farnesyl transferase inhibitors for treatment

of

Habte

<09/25/2002

tumors and proliferative diseases)

RN 405549-30-6 CAPLUS

CN Piperazine, 1-[[4-(3-chlorophenyl)-6-[(4-chlorophenyl)(1-methyl-1H-imidazol-5-yl)methyl]-2-quinolinyl]carbonyl]-4-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:185086 CAPLUS

DOCUMENT NUMBER: 136:247505

TITLE: Preparation of aminoquinolines as inhibitors of cGMP

phosphodiesterase

INVENTOR(S): Bi, Yingzhi; Yu, Guixue; Rotella, David P.; Macor,

John E.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT N	DATE			A	PPLI	CATI	ON N	0.	DATE									
								-										
WO 20020	A.	2	2002	0314		WO 2001-US26130 20010821												
WO 2002020489			A3 20020606															
W: .	ΑE,	AG,	ΑL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
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	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,		
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	PH,	PL,		
	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,		
	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM			
RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,		
	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF.		

BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.:

US 2000-230267P P 20000906

OTHER SOURCE(S):

MARPAT 136:247505

GI

$$R^{6}$$
 R^{7}
 R^{8}
 R^{2}
 R^{2}

AB Title compds. I [R2, R6, R7, and R8 = independently H, halo, (un)substituted alkyl, alkoxy, nitro, etc.; R4 and R5 = independently H, (un)substituted alkyl, cycloalkyl, aryl, or heteroaryl with provision R4 and R5 are not both H; R3 = (CH2)zY, wherein z = 0-3 and Y is independently selected from (un)substituted imidazole, triazole, OR9, CO2R9, CH(CO2R9)2, NR10R11, NR10CONR11R12, etc.; or R4 and R5 together with Y form a heterocyclic ring; R9 = H, OH, (un)substituted alkyl, alkoxy, aryl, heteroaryl, etc.; R10, R11 and R12 = independently H, (un)substituted alkyl, alkoxy, cycloalkyl, heterocyclo, heteroaryl, etc.; or R10 forms a 3-7 membered heterocyclo ring with R11 or R12, or R11 forms

a 3-7 membered ring with R12] are prepd. and disclosed as inhibitors of cGMP PDE, esp. type 5. Thus, II was prepd. via substitution of 4-chloro-6-cyanoquinoline-3-carboxylic acid Et ester with 3-chloro-4-methoxybenzylamine hydrochloride (97% yield). As inhibitors

particular erectile dysfunction (no data).

403839-27-0P 403839-34-9P 403839-35-0P
403839-36-1P 403839-42-9P 403839-43-0P
403839-44-1P 403839-45-2P 403839-46-3P
403839-47-4P 403839-49-6P 403840-15-3P
403840-16-4P 403840-17-5P 403840-18-6P

403840-20-0P 403840-21-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

Page 22

(target compd.; prepn. of aminoquinolines as inhibitors of cGMP phosphodiesterase)

RN 403839-27-0 CAPLUS

CN Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-3-quinolinyl]carbonyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 403839-34-9 CAPLUS

CN Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-3-quinolinyl]carbonyl]-4-ethyl- (9CI) (CA INDEX NAME)

RN

403839-35-0 CAPLUS
Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-3-CN quinolinyl]carbonyl]-4-cyclopentyl- (9CI) (CA INDEX NAME)

RN403839-36-1 CAPLUS

Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-3-CNquinolinyl]carbonyl]-4-(2-methoxyethyl)- (9CI) (CA INDEX NAME)

RN403839-42-9 CAPLUS

Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-8-ethyl-3-quinolinyl]carbonyl]-4-cyclopentyl- (9CI) (CA INDEX NAME) CN

RN 403839-43-0 CAPLUS

Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-8-CNethyl-3-quinolinyl]carbonyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)

RN

403839-44-1 CAPLUS Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-3-CN quinolinyl]carbonyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)

RN 403839-45-2 CAPLUS

Piperazine, 1-[[6-bromo-2-chloro-4-[[(3-chloro-4-CN methoxyphenyl)methyl]amino]-3-quinolinyl]carbonyl]-4-ethyl- (9CI) (CA INDEX NAME)

RN 403839-46-3 CAPLUS

CN Piperazine, 1-[[6-bromo-2-chloro-4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-3-quinolinyl]carbonyl]-4-(1-methylethyl)-(9CI) (CA INDEX NAME)

RN 403839-47-4 CAPLUS

CN Piperazine, 1-[[6-bromo-2-chloro-4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-3-quinolinyl]carbonyl]-4-cyclopentyl- (9CI) (CA INDEX NAME)

RN 403839-49-6 CAPLUS

CN Piperazine, 1-[[6-bromo-2-chloro-4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-3-quinolinyl]carbonyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 403840-15-3 CAPLUS

CN Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-3-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 403840-16-4 CAPLUS
CN 1-Piperazinepropanamine,
4-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6cyano-3-quinolinyl]carbonyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

RN 403840-17-5 CAPLUS
CN 1-Piperazineethanol, 4-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6cyano-3-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 403840-18-6 CAPLUS

CN Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-3-quinolinyl]carbonyl]-4-cyclohexyl- (9CI) (CA INDEX NAME)

RN 403840-20-0 CAPLUS

CN Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-3-quinolinyl]carbonyl]-4-(2-pyridinyl)- (9CI) (CA INDEX NAME)

RN 403840-21-1 CAPLUS

CN Piperazine, 1-[[4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-3quinolinyl]carbonyl]-4-(2-pyrimidinyl)- (9CI) (CA INDEX NAME)

ANSWER 5 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:107312 CAPLUS

DOCUMENT NUMBER:

136:167389

TITLE:

Preparation of pyrrole, indole, thiophene, pyrazole, imidazole, and isothiazole derivatives as inhibitors

of transforming growth factor-beta (TGF-.beta.)

INVENTOR(S):

Tokunaga, Teruhisa; Hume, William Ewan; Kitoh,

Makoto;

Nagata, Ryu

PATENT ASSIGNEE(S):

Sumitomo Pharmaceuticals Co., Ltd., Japan

PCT Int. Appl., 215 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

Habte

<09/25/2002

Page 31

PATENT INFORMATION:

PA	TENT 1	NO.		KIND DATE				A.	PPLI	CATI	ои ис	ο.	DATE				
WO	2002	0101	31	A1		2002	0207		W	20	0727						
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
	CR, CU,																
														LK,			
	LU, LV, SD, SE, YU, ZA,			MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	PL,	PT,	RO,	RU,
				SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
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		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
PRIORIT	Y APP					JP 2000-229423 A											
OTHER S	OTHER SOURCE(S):						MARPAT 136:167389										
GI																	

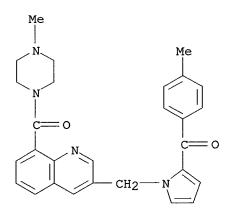
$$Ar^{1-W^{1}}$$
 Z $W^{2-Ar^{2}}$ I CO_{2H} R^{1} III

The title compds. represented by the following formula (I) or AΒ pharmaceutically acceptable salts of these [wherein ring Z represents an optionally substituted pyrrole, indole, thiophene, pyrazole, benzene, imidazole, or isothiazole; W2 represents CO, SO2, CONR (R = H, alkyl), optionally substituted C1-4 alkylene or C2-4 alkenylene; Ar2 represents optionally substituted aryl or heteroaryl; and W1 and Ar1 mean the following: (1) W1 represents optionally substituted C1-4 alkylene or C2-4 alkenylene, Arl represents bicyclic heteroaryl having one to four N atoms or (2) W1 represents optionally substituted C2-5 alkylene, C2-5 alkenylene, C2-5 alkynylene, or -Y-W3 (wherein Y = 0 or cycloalkanediyl; W3 = optionally substituted C1-5 alkylene, C2-5 alkenylene, or C2-5 alkynylene), Ar represents optionally substituted aryl or monocyclic heteroaryl substituted at ortho or meta position by CO2H, alkoxycarbonyl, optionally alkyl-substituted carbamoyl, cyclic aminocarbonyl, alkylsulfonylcarbonyl, arylsulfonylcarbonyl, alkylsulfonyl, etc.] or prodrugs or pharmacol. acceptable salts thereof are prepd. These compds. are useful as fibroid inhibitors for organs or tissues. Thus, bromination

<09/25/2002

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of 3-(4-chloro-2-methoxycarbonylphenyl)-2-propenol (prepn. given) by
    N-bromosuccinimide and PPh3 in CH2Cl2 at 0.degree. for 10 min gave
     3-(4-chloro-2-methoxycarbonylphenyl)-2-propenyl bromide (II). A THF
soln.
    of 2-(4-methylbenzoyl)pyrrole was added dropwise to a suspension of NaH
in
    THF and the resulting soln. was slowly added dropwise to a THF soln. of
ΙI
    at 55.degree. and stirred for 2 h to give 2-[3-[2-(4-methylbenzoyl)-1-
     pyrrolyl]-1-propen-1-yl]-5-chlorobenzoic acid Me ester which was sapond.
     with aq. NaOH in methanol and acidified with aq. HCl to give III (R = Me,
     R1 = H). In a kidney fibroid model using a rat Thy-1 nephritis model,
     administration of III.Na (R = Me, R1 = H) at 15 mg/kg and Thy-1 (one of
     surface antigens of thymocyte) to rats lowered the level of
hydroxyproline
     (fibroid index) in kidney compared to the control group administered only
     with Thy-1. III.Na (R = 2-morpholinoethoxy, R1 = Me) at 3 .mu.M in vitro
     inhibited the TGF-.beta.-induced prodn. of proteoglycan in MRK-49F rat
     fibroblast cells by 99%.
     397323-18-1P, 5-[(4-Methylpiperazin-1-yl)carbonyl]-3-[[2-(4-
ΙT
    methylbenzoyl)pyrrol-1-yl]methyl]quinoline 397323-62-5P
     , 8-((4-Methylpiperazin-1-yl)carbonyl)-3-[[2-(4-methylbenzoyl)pyrrol-1-
     yl]methyl]quinoline
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (prepn. of pyrrole, indole, thiophene, pyrazole, imidazole, and
        isothiazole derivs. as inhibitors of transforming growth factor-.beta.
        and fibroid inhibitors for organs or tissues)
     397323-18-1 CAPLUS
RN
     Piperazine,
CN
1-methyl-4-[[3-[[2-(4-methylbenzoyl)-1H-pyrrol-1-yl]methyl]-5-
     quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)
```



REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:90012 CAPLUS

2

DOCUMENT NUMBER: 136:134790

TITLE: Preparation of quinolylcarbonylpiperazines and

related

Page 34

compounds for treatment of tumors.

INVENTOR(S): Emig, Peter; Guenther, Eckhard; Schmidt, Juergen;

Nickel, Bernd; Kutscher, Bernhard

PATENT ASSIGNEE(S): Zentaris A.-G., Germany

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	NT NO.		KI	ND	DATE			А	PPLI	CATI	ON N	ο.	DATE				
								_									
WO 20	0020081	92	Α	1	2002	0131		W	0 20	0718							
Ţ	W: AU,	BG,	BR,	BY,	CN,	co,	CZ,	ΕE,	GE,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	
	KG,	KR,	ΚZ,	LT,	LV,	MK,	MX,	NO,	NZ,	PL,	RO,	RU,	SG,	SI,	SK,	TR,	
	UA,	YU,	ZA,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM					
I	RW: AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	
	PT,	SE,	TR														
DE 10	0035928		A	1	2002	0307		D	E 20	00-1	0035	928	2000				
US 20	0021032	14	A.	1 .	20020801			US 2001-910141 2001						0720			
PRIORITY A	APPLN.	INFO	.:			1	DE 2000-10035928 A						20000721				
OTHER SOUR	RCE(S):		MARPAT 136:			1347	90										
GI																	

$$\mathbb{R}^{1}$$
 \mathbb{R}^{2}
 \mathbb{R}^{2}
 \mathbb{R}^{2}
 \mathbb{R}^{3}
 \mathbb{R}^{2}
 \mathbb{R}^{4}
 \mathbb{R}^{2}
 \mathbb{R}^{3}
 \mathbb{R}^{4}
 \mathbb{R}^{2}
 \mathbb{R}^{3}
 \mathbb{R}^{4}
 \mathbb{R}^{4}

AB Title compds. [I; R-R3 = H, alkyl, cycloalkyl, alkylcarbonyl, alkoxy, halo, aralkoxy, NO2, amino, cyano, CO2H, CF3, etc.; RR1, R2R3 = atoms to form condensed 6-membered arom. rings; Z = O, S; X = N, CR5; R5 = H, alkyl; R4 = (substituted) (unsatd.) alkyl, aryl, aralkyl, etc.; P, Q = O, H2; m, n = 0-3], were prepd. Thus, quinoline-4-carboxylic acid in DMF was treated with N-methylmorpholine, Py-BOP (1-benzotriazolyltripyrrolidinophosphoniumhexafluorophosphate), and 1-(3,5-dimethoxyphenyl)piperazine in DMF. The mixt. was stirred 12 h to

give 78.3% 1-(3,5-dimethoxyphenyl)-4-(4-quinolylcarbonyl)piperazine. Title compd. (II) (D-43411) showed antiproliferative activity with IC50 <0.0003 .mu.g/mL against SKOV-3 tumor cells.

IT 393111-09-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of quinolylcarbonylpiperazines for treatment of tumors)

RN 393111-09-6 CAPLUS

CN Piperazine, 1-(3,5-dimethoxyphenyl)-4-(4-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:10442 CAPLUS

DOCUMENT NUMBER: 136:85762

TITLE: New aryl-, quinolyl-, and other heterocyclyl-

containing amino alcohol derivatives useful as

.beta.3

adrenergic receptor agonists

INVENTOR(S): Kayakiri, Hiroshi; Sakurai, Minoru; Washizuka,

Kenichi; Hamashima, Hitoshi; Tomishima, Yasuyo;

Fujii,

Naoaki; Taniguchi, Kiyoshi

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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<09/25/2002

PATENT NO. KIND DATE

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WO 2002000622 A2 20020103 WO 2001-JP5425 20010625
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
              RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         AU 2001-74613 20010625
AU 2000-8413 A 20000627
     AU 2001074613
                     A5 20020108
PRIORITY APPLN. INFO.:
                                         WO 2001-JP5425 W 20010625
OTHER SOURCE(S): MARPAT 136:85762
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
AΒ
     The invention relates to compds. I [wherein: X1 = bond or OCH2; X2 =
     (CH2)1-2; X3 = bond, O, or NH; R1 = (un)substituted Ph, indolyl, or
     carbazolyl [substituents = 1 or 2 of OH, halo, NO2, amino, formyl,
     (lower)alkylsulfonylamino, aryl(lower)alkoxy, and hydroxy(lower)alkyl];
R2
     = H or aryl(lower)alkyl; R3 = H or hydroxy(lower)alkyl; R4 =
     (un) substituted aryl, 4-quinolyl, phthalazinyl, quinazolinyl, cinnolinyl,
     or naphthyridinyl; with provisos], or their pharmaceutically acceptable
     salts. The compds. are .beta.3 adrenergic receptor agonists, and
     therefore have gut sympathomimetic, antiulcer, anti-pancreatitis,
     lipolytic, and smooth muscle relaxant activities. In particular, I and
     salts are useful for the prophylactic and/or the therapeutic treatment of
     pollakiuria or urinary incontinence. Sixty precursor prepns. and 63
     invention examples, including well over 200 invention compds., are
     provided. For example, the structure of claimed compd. II is typical.
     Another invention compd., phthalazine deriv. III, was prepd. from
     4-((2S)-2-amino-3-hydroxypropyl)phenol HCl, benzaldehyde,
     (2S)-3-phenoxy-1,2-epoxypropane, and 1-chlorophthalazine, in 4 steps.
III
     at 0.32 mg/kg (intraduodenal) in beagle dogs gave 35.9% inhibition of
     carbachol-induced increase in intravesical pressure.
IT
     386208-52-2P, (2S)-2-[N-((2S)-2-Hydroxy-3-phenoxypropyl)amino]-3-
     [4-[[7-[(4-methyl-1-piperazinyl)carbonyl]-4-quinolyl]oxy]phenyl]propan-1-
     ol 386208-53-3P, (2S)-2-[N-((2S)-2-Hydroxy-3-
     phenoxypropyl)amino]-3-[4-[[7-(1-piperazinylcarbonyl)-4-
     quinolyl]oxy]phenyl]propan-1-ol 386209-78-5P,
     (2S)-2-[N-Benzyl-N-((2S)-2-hydroxy-3-phenoxypropyl)amino]-3-[4-[[7-[(4-
    methyl-1-piperazinyl)carbonyl]-4-quinolyl]-oxy]phenyl]propan-1-ol
```

APPLICATION NO. DATE

Habte <09/25/2002

386209-79-6P, (2S)-2-[N-Benzyl-N-((2S)-2-hydroxy-3-

Absolute stereochemistry.

RN 386208-53-3 CAPLUS

CN Piperazine, 1-[[4-[4-[(2S)-3-hydroxy-2-[[(2S)-2-hydroxy-3-phenoxypropyl]amino]propyl]phenoxy]-7-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 386209-78-5 CAPLUS

CN Piperazine, 1-[[4-[4-(2S)-3-hydroxy-2-[(2S)-2-hydroxy-3-

phenoxypropyl] (phenylmethyl) amino]propyl]phenoxy]-7-quinolinyl]carbonyl]-4-

methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 386209-79-6 CAPLUS

CN Piperazine, 1-[[4-[4-[(2S)-3-hydroxy-2-[[(2S)-2-hydroxy-3-

Absolute stereochemistry.

L5 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:769282 CAPLUS

DOCUMENT NUMBER:

135:313616

TITLE:

Heterocyclic sulfonyl compounds and activated blood coagulation factor X (FXa) inhibitors containing them

INVENTOR(S):

Kobayashi, Shozo; Komoritani, Satoshi; Haginoya, Noriyasu; Suzuki, Masanori; Yoshino, Toshiharu; Nagahara, Takayasu; Yoshikawa, Kenji; Muto, Akira; Ozanai, Takeshi; Nakamoto, Yumi; Mochizuki, Akiyoshi;

Nagata, Tsutomu

PATENT ASSIGNEE(S):

SOURCE:

Daiichi Seiyaku Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 304 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

QΑ

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2001294572 A2 20011023 JP 2000-38100 20000209

OTHER SOURCE(S): MARPAT 135:313616

AB Pharmaceuticals, useful for prevention and/or treatment of thrombus and embolus, contain Q1Q2T1SO2QA [I; Q1 = (un)substituted bicyclic or tricyclic group; Q2 = single bond, O, S, C1-6 alkylene, etc.; Q3 = N-contg. cyclic group; QA = (un)substituted (hetero)arylalkenyl, bicyclic or tricyclic group, etc.; T1 = CO, (un)substituted methylene, etc.], their

salts, or solvates. (2RS)-2-(N-tert-butoxycarbonylaminomethyl)-6-methoxycarbonyl-1,2,3,4-tetrahydronaphthalene was treated with NaOH, condensed with <math>1-[(6-chloronaphthalen-2-yl)sulfonyl]piperazine.HCl, and deprotected to give <math>(RS)-I.HCl (Q1=6-aminomethyl-5,6,7,8-tetrahydronaphthalen-2-yl, Q2=bond, T1=CO, Q3=1,4-piperazinediyl,

= 6-chloronaphthalen-2-yl). I.HCl (Q1 = 5-methyl-4,5,6,7-tetrahydrothiazolo[5,4-c]pyridin-2-yl, Q2 = bond, T1 = CO, Q3 = 1,4-piperazinediyl, QA = 6-chloronaphthalen-2-yl) in vitro inhibited human

FXa with IC50 of 20 nM.

IT 222985-51-5P 222985-52-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclic sulfonyl compds. as activated blood coagulation

factor X inhibitors)

RN 222985-51-5 CAPLUS

CN Piperazine, 1-[(6-chloro-2-naphthalenyl)sulfonyl]-4-[(4-hydroxy-2-quinolinyl)carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

HCl

RN 222985-52-6 CAPLUS

CN Piperazine, 1-[(6-chloro-2-naphthalenyl)sulfonyl]-4-[(8-hydroxy-7-quinolinyl)carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

L5 ANSWER 9 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:222008 CAPLUS

DOCUMENT NUMBER: 134:252257

TITLE: Preparation of 2-(indolin-3-yl) quinoline

derivatives and compositions in use as antimicrobial

agents

INVENTOR(S): Cuny, Gregory D.; Hauske, James R.; Heefner, Donald

L.; Hoemann, Michael Z.; Kumaravel, Gnanasambandam;

Melikian-Badalian, Anita; Rossi, Richard F.

PATENT ASSIGNEE(S): Sepracor, Inc., USA

SOURCE: U.S., 112 pp., Cont.-in-part of U.S. Ser. No.

878,781,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PA	PATENT NO.				KIND DATE				APPLICATION NO.							DATE			
US	6207679			В:	1	20010327				US 1998-45051						19980319			
WO	9857931			A.	2	19981223			WO 1998-US12762						19980618				
WO	9857931			A.	3	1999													
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BB,	BG,	BR	, B	Y, C	Ά,	CH,	CN,	CU,	CZ,	DE,	DK,	
		EE,	ES,	FI,	GB,	GE,	GH,	BM,	GW	, HU	J, I	D,	IL,	IS,	JP,	KE,	KG,	KP,	
		KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU	, L\	<i>J</i> , M	ΙD,	MG,	MN,	MW,	MX,	NO,	ΝZ,	
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EP	EP 991623			A2 20000412			EP 1998-930396					6	19980618						
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		ΙE,																	
	US 6172084				B1 20010109					US 1	1998	-99	9640		1998	0618			
JP	JP 2002505689				T2 20020219				JP 1999-504835						19980618				
								US 1998-213385											
NO	NO 9906269			A 20000216			NO 1999-6269												
	US 6376670 B1					2002		US 2000-658690 US 1997-878781											
PRIORIT	PRIORITY APPLN. INFO.:																		
															1998				
									US 1998-99640										
											98-US12762 1 98-213385 2								
	THER SOURCE(S): MARPAT 134									Z U U (J-63	962		AZ	2000	0013			
GI GI	III DOUROD (D)						134:	2322	<i>3 I</i>										

$$R^4$$
 R^3
 R^3
 R^3
 R^3
 R^3
 R^3
 R^3
 R^3

Ι

AB Title compds. I [wherein; R, R1, R2 and R3 are H, halo, alk(en)(yn)yl, OH,

alkoxy, amino, nitro, SH, imine, amide, CO, -(CH2)0-8-R80, etc.; R4 is the

same as R-R3 but not H; R5 is the same as R4 except that at least 1(-8) CH2 precede R80; A is (un)substituted with any no. of R4 up to the no. limited by stability and rules of valence; B is substituted with at least one instance of R5 up to the no. limited by stability and rules of valence; R80 is (substituted) aryl, cycloalk(en)yl, heterocyclyl or polycyclyl.] and related quinoline derivs. are prepd. as antimicrobial agents. For instance, synthesis of II is accomplished by alkylation of

4-hydroxymethyl-6-trifluoromethyl-2-(N-t-butoxycarbonylindol-

3-yl)quinoline with (4-t-butoxycarbonylaminomethyl)benzyl iodide followed by deprotection. There are 282 examples of I provided. The min.

inhibitory concn. (MIC) of I against at least one Gram-pos. bacterium is 0.1--10 .mu.g/mL. Certain compds. of formula I have a therapeutic index

primates of at least 10 for the inhibition of infection by at least one $\operatorname{Gram-pos.}$ bacterium.

IT 210698-12-7P 218463-01-5P 218463-13-9P 218463-16-2P 218463-17-3P 218463-19-5P 218463-32-2P 218463-41-3P 218463-49-1P 218463-50-4P 218463-51-5P 218463-52-6P 218463-53-7P 218463-54-8P 218463-55-9P

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<09/25/2002

218463-56-0P 218464-15-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and use of quinolinylindole derivs. as antimicrobial agents) 210698-12-7 CAPLUS

CN Piperazine, 1-[[2-(1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX

NAME)

RN

RN 218463-01-5 CAPLUS

CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 218463-13-9 CAPLUS

CN Piperazine, 1-[(2-tricyclo[3.3.1.13,7]dec-1-yl-4-quinolinyl)carbonyl]- (9CI) (CA INDEX NAME)

RN 218463-16-2 CAPLUS

CN 1-Piperazineacetic acid, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-.alpha.-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 218463-17-3 CAPLUS

CN Piperazine,

1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-methyl-(9CI) (CA INDEX NAME)

RN

218463-19-5 CAPLUS
Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(4-fluorophenyl)- (9CI) (CA INDEX NAME) CN

RN 218463-32-2 CAPLUS

Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME) CN

RN 218463-41-3 CAPLUS

CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-iodo-4-quinolinyl]carbonyl](9CI) (CA INDEX NAME)

RN 218463-49-1 CAPLUS

CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 218463-50-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 218463-51-5 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Habte

<09/25/2002

RN 218463-52-6 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-53-7 CAPLUS

Habte

<09/25/2002

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

- RN 218463-54-8 CAPLUS
- CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-56-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 218464-15-4 CAPLUS

CN Piperazine,

1-[[2-(5-bromo-1H-indol-3-yl)-6-chloro-4-quinolinyl]carbonyl](9CI) (CA INDEX NAME)

REFERENCE COUNT: THIS

43

THERE ARE 43 CITED REFERENCES AVAILABLE FOR

FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

Page 52 09/910,141

 L_5 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:25778 CAPLUS

DOCUMENT NUMBER: 134:86170

TITLE: Quinoline-indole antimicrobial agents

Cuny, Gregory D.; Hauske, James R.; Heefner, Donald INVENTOR(S): L.; Hoemann, Michael Z.; Kumaravel, Gnanasambandam;

Melikian-badalian, Anita; Rossi, Richard F.

PATENT ASSIGNEE(S): Sepracor, Inc., USA

SOURCE: U.S., 151 pp., Cont.-in-part of U.S. Ser. No. 45,051.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
US 6172084	B1	20010109		US 1998-99640	19980618
US 6207679	B1	20010327		US 1998-45051	19980319
US 6103905	Α	20000815		US 1998-213385	19981211
US 6376670	В1	20020423		US 2000-658690	20000908
PRIORITY APPLN. INFO.	:		US	1997-878781 B	2 19970619
			US	1998-45051 A	2 19980319
			US	1998-99640 A	2 19980618
			US	1998-213385 A	1 19981211
			US	2000-639622 A	2 20000815

MARPAT 134:86170 OTHER SOURCE(S):

GΙ

$$R^4$$
 R^3
 R^6
 R^7
 R^7
 R^7

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

Habte <09/25/2002

II

$$R^4$$
 R^3
 R^6
 R^7
 R^7
 R^7

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

AB Indolylquinolines I [X = N; Y = NR; R-R3 = independently H, halogen, alkyl, alkenyl, alkynyl, OH, alkoxy, silyloxy, NH2, NO2, SH, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, CO, CONH2, anhydride, silyl, alkylsulfonyl, arylsulfonyl, alkylseleno, aldehyde, ester, heteroalkyl, CN, guanidine, amidine, acetal, ketal, amine oxide, (hetero)aryl, azide, aziridine, carbamate, epoxide, C(:NH)OH, imide, oxime, SO2NH2, CSNH2, thiocarbamate, urea, thiourea, or (CH2)mR80; R4R5, R6R7 = atoms required to complete an (un)substituted fused benzo ring system; R80 = (un)substituted aryl, cycloalkyl, cycloalkenyl, heterocycle,

II

or polycycle; m=0-8] were prepd. by conventional or combinatorial synthetic methods for use as bactericides. Thus, 4-H2NCH2C6H4CO2H was esterified, N-tert-butoxycarbonylated, reduced, and treated with iodine

give 4-BocNHCH2C6H4CH2I, which was coupled with the indolylquinolinemethanol fragment and deblocked to give the product II. II had MIC's <7 .mu.g/mL against methicillin-resistant Staphylococcus aureus, vancomycin-resistant Enterobacter sp., and Streptococccus pneumoniae.

IT 210698-12-7P 218463-01-5P 218463-13-9P 218463-16-2P 218463-17-3P 218463-19-5P 218463-32-2P 218463-41-3P 218463-49-1P 218463-50-4P 218463-51-5P 218463-52-6P 218463-53-7P 218463-54-8P 218463-55-9P 218463-56-0P 218464-15-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of indolylquinoline bactericides by conventional or combinatorial methods)

RN 210698-12-7 CAPLUS

CN Piperazine, 1-[[2-(1H-indol-3-yl)-4-quinolinyl]carbonyl]-(9CI) (CA INDEX

NAME)

RN 218463-01-5 CAPLUS

CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 218463-13-9 CAPLUS

CN Piperazine, 1-[(2-tricyclo[3.3.1.13,7]dec-1-yl-4-quinolinyl)carbonyl]- (9CI) (CA INDEX NAME)

RN 218463-16-2 CAPLUS

CN 1-Piperazineacetic acid, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-.alpha.-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 218463-17-3 CAPLUS

CN Piperazine,

.1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-methyl-(9CI) (CA INDEX NAME)

RN 218463-19-5 CAPLUS

CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 218463-32-2 CAPLUS

CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN

218463-41-3 CAPLUS
Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-iodo-4-quinolinyl]carbonyl]-CN(9CI) (CA INDEX NAME)

RN218463-49-1 CAPLUS

Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME) CN

PAGE 1-B

RN 218463-50-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 218463-51-5 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-52-6 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-53-7 CAPLUS

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<09/25/2002

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-54-8 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

Habte

<09/25/2002

RN 218463-56-0 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

Page 62

RN 218464-15-4 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-chloro-4-quinolinyl]carbonyl]-(9CI) (CA INDEX NAME)

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L5 ANSWER 11 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:825244 CAPLUS

DOCUMENT NUMBER: 134:147129

TITLE: A rapid approach for the optimization of polymer

supported reagents in synthesis

AUTHOR(S): Jamieson, Craig; Congreve, Miles S.; Emiabata-Smith,

David F.; Ley, Steven V.

CORPORATE SOURCE: Department of Chemistry, University of Cambridge,

Cambridge, CB2 1EW, UK

SOURCE: Synlett (2000), (11), 1603-1607 CODEN: SYNLES; ISSN: 0936-5214

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:147129

The technique of Design of Expts. (DoE) was employed to facilitate the rapid automated optimization of amide formation using a polymer-supported carbodiimide system. Using an optimized set of reaction conditions, an array of 80 compds. was synthesized in a 96-well plate with the reagent being delivered via an IRORI kan to each individual well. The carbodiimide reagent is com. available (Argonaut Technologies); it is represented by chloromethylated styrene-bound

3-(cyclohexylazo)-1-propanol

[i.e., N-cyclohexylcarbodiimide-N'-(propyloxy)methyl polystyrene (sic)].

IT 322763-78-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of amides by polymer-supported carbodiimide-mediated condensation of amines with carboxylic acids (optimization of polymer-supported reagents in synthesis))

RN 322763-78-0 CAPLUS

CN Piperazine, 1-(phenylmethyl)-4-(3-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:627999 CAPLUS DOCUMENT NUMBER: 133:222744

DOCUMENT NUMBER: 133:222744

TITLE: Preparation of 1-acyl-4-cyanobenzylimidazolylmethylpip

erazines and related compounds as inhibitors of

prenyl-protein transferases.

INVENTOR(S): Stump, Craig A.; Williams, Theresa M.

PATENT ASSIGNEE(S): SOURCE:

Merck & Co., Inc., USA

PCT Int. Appl., 122 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                            KIND DATE
                                                        APPLICATION NO.
                                                                              DATE
                                                        -----
      WO 2000051614
                             A1
                                    20000908
                                                        WO 2000-US5354
                                                                              20000301
           W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
                CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
                DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
                CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      EP 1165084
                             A1 20020102
                                                        EP 2000-910386
                                                                              20000301
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                                    US 1999-122971P P
                                                                              19990303
                                                    US 1999-127252P P
                                                                              19990331
                                                    WO 2000-US5354
                                                                              20000301
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OTHER SOURCE(S):

MARPAT 133:222744

GI

$$Q^{1}N$$
 $NA^{3}Z$
 I

AΒ Title compds. I; Rla, Rlb = H, aryl, heterocyclyl, cycloalkyl, alkenyl, alkynyl, (substituted) alkyl, etc.; R8 = H, (substituted) aryl, heterocyclyl, cycloalkyl, alkenyl, alkynyl, perfluoroalkyl, F, Cl, Br, N3,

NO2, cyano, etc.; R9 = H, alkenyl, alkynyl, perfluoroalkyl, F, Cl, Br, (substituted) alkyl, etc.; A1, A2 = bond, CH:CH, C.tplbond.C, CO, O, S, SO, SO2, etc.; A3 = CO, S, SO, SO2; V = H, heterocyclyl, aryl, alkyl, alkenyl; W = heterocyclyl; Z = (substituted) aryl, heteroaryl; Q = (CH2)s;

Q1 = (R8) mVAl [C(R1a)2] nA2 [C(R1a)2] nW(R9) q[C(R1b)2] p; m = 0-5; n, p = 0-4;q = 1, 2; s = 0, 1; with provisos, were prepd. Thus, 1-[1-(4cyanobenzyl)imidazol-5-ylmethyl]piperazine trihydrochloride, 2-methoxyquinoline-4-carboxylic acid, EDC hydrochloride, hydroxybenzotriazole, and EtN(CHMe2)2 were stirred in DMF to give 4-[1-(4-cyanobenzyl)] imidazol-5-ylmethyl]-1-(2-methoxyquinolin-4oyl)piperazine trihydrochloride. Tested I inhibited human farnesyl

Page 65

CN Piperazine, 1-[[1-[(4-cyanophenyl)methyl]-1H-imidazol-5-yl]methyl]-4-[(2-methoxy-4-quinolinyl)carbonyl]- (9CI) (CA INDEX NAME)

RN 290819-47-5 CAPLUS

CN Piperazine, 1-[[1-[(4-cyanophenyl)methyl]-1H-imidazol-5-yl]methyl]-4-(8-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)

RN 290819-49-7 CAPLUS

CN Piperazine, 1-[[1-[(4-cyanophenyl)methyl]-1H-imidazol-5-yl]methyl]-4-(2-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)

RN 290819-57-7 CAPLUS

CN Piperazine, 1-[[1-[(4-cyanophenyl)methyl]-1H-imidazol-5-yl]methyl]-4-[(2-methoxy-4-quinolinyl)carbonyl]-, trihydrochloride (9CI) (CA INDEX NAME)

●3 HCl

RN 290819-77-1 CAPLUS

CN Piperazine, 1-[[1-[(4-cyanophenyl)methyl]-1H-imidazol-5-yl]methyl]-4-(8-quinolinylcarbonyl)-, trihydrochloride (9CI) (CA INDEX NAME)

RN 290819-80-6 CAPLUS

CN Piperazine, 1-[[1-[(4-cyanophenyl)methyl]-1H-imidazol-5-yl]methyl]-4-(2-quinolinylcarbonyl)-, trihydrochloride (9CI) (CA INDEX NAME)

● 3 HCl

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:595751 CAPLUS

DOCUMENT NUMBER: 133:290645

TITLE: Synthesis and antidepressant activity study of aryl

and heteroaryl carboxamides of benzylpiperazine

AUTHOR(S): Younes-El-Hage, S.; Labssita, Y.; Baziard-Mouysset,

G.; Payard, M.; Caignard, D.-H.; Rubat, C.

CORPORATE SOURCE: Chim. Pharm., Fac. Pharm., Toulouse, F-31400, Fr.

SOURCE: Annales Pharmaceutiques Françaises (2000), 58(4),

254-259

CODEN: APFRAD; ISSN: 0003-4509

PUBLISHER: Masson Editeur

DOCUMENT TYPE: Journal LANGUAGE: French

AB The synthesis of 44 original amide derivs. of benzylpiperazine and some analogs of befuraline and piberaline is reported. All compds. were

tested

for antidepressant activity and 3 appeared active.

IT 219744-25-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis and antidepressant activity of aryl and heteroaryl carboxamides of benzylpiperazine)

RN 219744-25-9 CAPLUS

CN Piperazine, 1-(phenylmethyl)-4-(2-quinolinylcarbonyl)-, monohydrochloride

(9CI) (CA INDEX NAME)

● HCl

REFERENCE COUNT:

26

THERE ARE 26 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2000:568542 CAPLUS

DOCUMENT NUMBER:

133:150464

TITLE:

Preparation of quinolinylindole derivatives and

compositions in use as antimicrobial agents

INVENTOR(S):

Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Hoemann, Michael Z.; Kumaravel, Gnanasambandam; Melikian-Badalian, Anita; Rossi, Richard F.; Xie,

Roger L.

PATENT ASSIGNEE(S):

Sepracor, Inc., USA

SOURCE:

U.S., 228 pp., Cont.-in-part of U.S. Ser. No. 99,640.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT	NO.		KI:	ND	DATE			A	PPLI	CATI	ON N	ο.	DATE			
US 6103905 A			20000815			U	 S 19	 98-2	1338	 5	19981211						
US 6207679 B1			20010327				US 1998-45051					19980319					
US 6172084 B1			1	20010109			US 1998-99640										
WO	WO 2000034265			A	A2 20000615				WO 1999-US28744					19991203			
						AU,											CU.
		CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
						TR,											
						RU,											•
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,
		DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
						GN,											•
US	US 6376670 B1				1	20020	0423		US 2000-658690 20000908								

PRIORITY APPLN. INFO.:

US 1997-878781
US 1998-45051
US 1998-99640
US 1998-213385
A 19981211
US 2000-639622
A2 20000815

OTHER SOURCE(S): MARPAT 133:150464

GΙ

=

AB Title compds. [I; Q = hydrophobic group, H; X = heterocyclyl, amidinyl, formamidonyl, guanidinyl, CN, CSNR2, OR, SR; Z = CC, (E)-CH:CH, (Z)-CH:CH,

Ι

(CH2)2; L = hydrophobic group, H; R represents independently for each occurrence = H, alkyl, heteroalkyl, aryl, heteroaryl, acyl, sulfonyl; R1

H, alkyl, aryl, 4-CH3C6H4SO2, (CH2)d; d=1-6; R2=H, alkyl, aryl; R3=H, alkyl, aryl; m=1-8; n=1-4] and pharmaceutical prepns. using title compds. are prepd. as antimicrobial agents. The MIC value of I against

least one Gram-pos. bacterium ranged from 0.1-10 .mu.g/mL. Thus, the title compd. II was prepd. and has a therapeutic index in primates of at least 10 for the inhibition of infection by at least one Gram-pos. bacterium.

210698-12-7P 218463-01-5P 218463-13-9P 218463-16-2P 218463-17-3P 218463-19-5P 218463-32-2P 218463-41-3P 218463-49-1P 218463-50-4P 218463-51-5P 218463-52-6P 218463-53-7P 218463-54-8P 218463-55-9P 218463-56-0P 218464-15-4P 275357-17-0P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. of quinolinylindole derivs. as antimicrobial agents) RN 210698-12-7 CAPLUS CN Piperazine, 1-[[2-(1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 218463-01-5 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 218463-13-9 CAPLUS CN Piperazine, 1-[(2-tricyclo[3.3.1.13,7]dec-1-yl-4-quinolinyl)carbonyl]-(9CI) (CA INDEX NAME)

RN 218463-16-2 CAPLUS

CN 1-Piperazineacetic acid, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-.alpha.-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 218463-17-3 CAPLUS

CN Piperazine,

1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-methyl-(9CI) (CA INDEX NAME)

RN 218463-19-5 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 218463-32-2 CAPLUS
CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4(phenylmethyl)- (9CI) (CA INDEX NAME)

RN

218463-41-3 CAPLUS
Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-iodo-4-quinolinyl]carbonyl]-CN (9CI) (CA INDEX NAME)

RN

218463-49-1 CAPLUS
Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME) CN

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PAGE 1-B

RN 218463-50-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 218463-51-5 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-52-6 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Page 76

RN 218463-53-7 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

- RN 218463-54-8 CAPLUS
- CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-56-0 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 218464-15-4 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-chloro-4-quinolinyl]carbonyl]-(9CI) (CA INDEX NAME)

RN 275357-17-0 CAPLUS CN Piperazine, 1-[[7-fluoro-2-(6-fluoro-1H-indol-3-yl)-4-quinolinyl]carbonyl]-(9CI) (CA INDEX NAME)

<09/25/2002

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09/910,141 Page 80

REFERENCE COUNT:

39 TH

THERE ARE 39 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 15 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2000:401813 CAPLUS

DOCUMENT NUMBER:

133:43453

TITLE:

Preparation of 2-(3-indoly1)quinolines as

antibacterial agents

INVENTOR(S):

Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Hoemann, Michael Z.; Kumaravel, Gnanasambandam; Melikian-Badalian, Anita; Rossi, Richard F.; Xie,

Roger L.

PATENT ASSIGNEE(S):

SOURCE:

Sepracor, Inc., USA

PCT Int. Appl., 155 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

Englis

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PA	KIND DATE					A	PPLI	CATI	ON N	ο.	DATE								
WO	2000	0342	- 65	 A	2	2 <u>00</u> 0	 0615		W	- 0 19	 99-U	 S287	 44	1999	 1203				
	W:	ΑE,	ΑL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,		
		CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,		
		IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,		
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,		
		SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,		
						RU,								•	•	•	•		
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,		
		DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,		
		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		-	·	•		
<u>US</u>	6103	905		Α		20000	0815		U:	S 199	98-23	1338	5	19981211					
PRIORITY APPLN. INFO.:								Ţ	JS 1	998-2	21338	35	Α	19981	L211				
								τ	JS 19	997-8	87878	31	B2	19970	0619				
								Ţ	JS 19	998-4	4505	L	A2	1998(319				

US 1998-99640 A2 19980618

OTHER SOURCE(S):

GI

MARPAT 133:43453

 $(CR_2)_m - x$ - $(CR_2)_n - z$ _R3

R2

 R^{1}

I

NH₂ F₃C II

The title compds. (I) [wherein L and Q = independently a hydrophobic AB group

or is absent; X = heterocyclyl, (form)amidinyl, guanidinyl, CN, C(S)NR2, N(R)C(S)R, OR, SR, NR2, or PR2; Z = C.tplbond.C, CH:CH, or CH2CH2; R = independently H, (hetero)alkyl, (hetero)aryl, acyl, sulfonyl, etc.; R1 = H, alkyl, aryl, p-toluenesulfonyl, phthalimidoalkyl, or aminoalkyl; R2

and

R3 = independently H, alkyl, or acyl] were prepd. by std. synthetic and solid phase combinatorial methods. For example, II was synthesized in a 3-step sequence involving: (1) redn. of 2-[5-bromo-1-(tertbutoxycarbonyl)indol-3-yl]-6-(trifluoromethyl)-4-

quinolinecarboxylic acid to the alc. with LiAlH4 (44%), (2) addn. of 4-iodo-N-(tert-butoxycarbonyl)benzylamine (prepn. given) to the alc. (82%), and (3) indolyl and amine deprotection using TFA (78%). Nearly two-thirds of the 534 indolylquinolines tested in assays against cultures of methicillin-resistant Staphylococcus aureau (MRSA),

ciprofloxacin-resistant Staphylococcus aureus (CRSA),

vancomycin-resistant

Enterococcus spp.(VRE), and/or penicillin-resistant Pseudomonas (PRP) had

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in vitro min. inhibitory concns. (MICs) .ltoreq. 10 .mu.M. For 12 of the 15 compds. tested in vivo for toxicity, all mice were surviving 7 days after administration of 40 mg/kg doses. ΙT 210698-12-7P 218463-01-5P 218463-13-9P 218463-16-2P 218463-17-3P 218463-19-5P 218463-32-2P 218463-41-3P 218463-49-1P 218463-50-4P 218463-51-5P 218463-52-6P 218463-53-7P 218463-54-8P 218463-55-9P 218463-56-0P 218464-15-4P 275357-17-0P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of 2-(3-indoly1)quinolines as antibacterial agents) RN 210698-12-7 CAPLUS Piperazine, 1-[[2-(1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA CN INDEX NAME)

Page 82

RN 218463-01-5 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 218463-13-9 CAPLUS

CN Piperazine, 1-[(2-tricyclo[3.3.1.13,7]dec-1-yl-4-quinolinyl)carbonyl](9CI) (CA INDEX NAME)

RN 218463-16-2 CAPLUS

CN 1-Piperazineacetic acid, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-.alpha.-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 218463-17-3 CAPLUS

CN Piperazine,

1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-methyl-(9CI) (CA INDEX NAME) 09/910,141 Page 84

RN

218463-19-5 CAPLUS Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(4-CNfluorophenyl) - (9CI) (CA INDEX NAME)

RN

218463-32-2 CAPLUS
Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4(phenylmethyl)- (9CI) (CA INDEX NAME) CN

RN

218463-41-3 CAPLUS
Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-iodo-4-quinolinyl]carbonyl]-CN (9CI) (CA INDEX NAME)

218463-49-1 CAPLUS RN

CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

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PAGE 1-B

RN 218463-50-4 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-

1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 218463-51-5 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-52-6 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX

RN 218463-53-7 CAPLUS

1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA CN INDEX NAME)

- 218463-54-8 CAPLUS
- RN1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA CN INDEX NAME)

<09/25/2002

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RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-56-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

09/910,141 Page 91

ANSWER 16 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:184027 CAPLUS

DOCUMENT NUMBER: 132:321845

TITLE: Synthesis and structure-activity relationships of

novel arylalkyl 4-benzylpiperazine derivatives as

.sigma.-site selective ligands

AUTHOR(S): Younes, Salome; Labssita, Youssef; Baziard-Mouysset,

Genevieve; Payard, Marc; Rettori, Marie-Claire;

Renard, Pierre; Pfeiffer, Bruno; Caignard,

Daniel-Henri

CORPORATE SOURCE: Laboratoire de chimie pharmaceutique, faculte de

pharmacie, Toulouse, 31062, Fr.

SOURCE: European Journal of Medicinal Chemistry (2000),

35(1),

107-121

CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Editions Scientifiques et Medicales Elsevier

DOCUMENT TYPE: Journal LANGUAGE: English

Continuing our previous work that established that some chromones substituted by an arylalkyl piperazino alkyl side-chain are potent and selective .sigma. ligands and could be interesting in the treatment of psychosis, we synthesized 60 new compds., replacing the chromone moiety

by

various cyclic systems. Many derivs. bind to the .sigma. sites in the nanomolar range and are generally selective in comparison with 5HT1A and the D2 receptors. One of the most potent ligands of these series, 1-(2-naphthylmethyl)-4-benzylpiperazine, was studied in various pharmacol.

tests. Although it does not have potential in the treatment of psychosis,

the results we obtained confirm the data which indicates that such derivs.

could be interesting in the treatment of inflammatory diseases. 266674-17-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

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<09/25/2002

09/910,141 Page 92

study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and structure-activity relationships of arylalkylated benzylpiperazines as .sigma.-site selective ligands)

RN 266674-17-3 CAPLUS

CN Piperazine, 1-(phenylmethyl)-4-(2-quinolinylcarbonyl)-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

L5 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:133658 CAPLUS

DOCUMENT NUMBER: 132:194391

TITLE: Preparation

TITLE: Preparation of sulfonyl moiety-containing

heterocyclic

compounds as factor Xa inhibitors
INVENTOR(S): Kobayashi, Syozo: Komoriya, Satoshi

INVENTOR(S): Kobayashi, Syozo; Komoriya, Satoshi; Haginoya, Noriyasu; Suzuki, Masanori; Yoshino, Toshiharu;

Nagahara, Takayasu; Nagata, Tsutomu; Horino,

Haruhiko;

Ito, Masayuki; Mochizuki, Akiyoshi

PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 883 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE:

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND				ND	DATE			A	PPLI	CATI	ON N	ο.	DATE					
WO :	W:	AE, DE, JP, MN, TM, MD, GH, ES,	AL, DK, KE, MW, TR, RU, GM, FI,	AM, EE, KG, MX, TT, TJ, KE, FR,	AT, ES, KP, NO, UA, TM LS, GB,	AU, FI, KR, NZ, UG,	AZ, GB, KZ, PL, US, SD, IE,	BA, GD, LC, PT, UZ, SL, IT,	BB, GE, LK, RO, VN,	BG, GH, LR, RU, YU, UG, MC,	BR, GM, LS, SD, ZA, ZW, NL,	BY, HR, LT, SE, ZW, AT, PT,	CA, HU, LU, SG, AM,	1999 CH, ID, LV, SI, AZ, CH, BF,	CN, IL, MD, SK, BY,	CU, IN, MG, SL, KG,	IS, MK, TJ, KZ,	

09/910,141 Page 93

20000425 JP 1999-226878 19990810 JP 2000119253 A2 Α1 20000306 AU 1999-51963 19990811 AU 9951963 20010606 EP 1999-937024 19990811 EP 1104754 A1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO 19990830 20000526 JP 1999-242814 JP 2000143623 A2 PRIORITY APPLN. INFO .: JP 1998-227449 Α 19980811 JP 1998-244175 A 19980828 A 19980904 JP 1998-251674 19990811 WO 1999-JP4344 MARPAT 132:194391 OTHER SOURCE(S): The title compds. Q1Q2T1Q3SO2QA [wherein Q1 is an optionally substituted, AΒ satd. or unsatd., five- or six-membered cyclic hydrocarbon group, a fiveor six-membered heterocyclic group, or the like; Q2 is a single bond, oxygen, sulfur, C1-C6 alkylene or the like; Q3 is a heterocyclic ring (represented by several generic structures); QA is optionally substituted arylalkenyl, heteroarylalkenyl or the like; and T1 is carbonyl or the like] are prepd. These compds. have potent factor Xa inhibiting effects and promptly exert satisfactory and persistent antithrombotic effects through oral administration, thus being useful as anticoagulant agents little accompanied with side effects. Several compds. of this invention in vitro showed IC50 values of 0.7 nM to 4.7 nM against factor Xa. 222985-50-4P 222985-51-5P 222985-52-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of sulfonyl moiety-contg. heterocyclic compds. as factor Xa inhibitors)

RN 222985-50-4 CAPLUS

CN Piperazine,

$$\begin{array}{c|c}
 & \circ \\
 & \circ \\$$

● HCl

RN 222985-51-5 CAPLUS

CN Piperazine, 1-[(6-chloro-2-naphthalenyl)sulfonyl]-4-[(4-hydroxy-2-quinolinyl)carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Page 94 09/910,141

HCl

RN222985-52-6 CAPLUS

Piperazine, 1-[(6-chloro-2-naphthalenyl)sulfonyl]-4-[(8-hydroxy-7-CN quinolinyl)carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

CAPLUS COPYRIGHT 2002 ACS ANSWER 18 OF 45

ACCESSION NUMBER:

2000:34889 CAPLUS

DOCUMENT NUMBER:

132:93658

TITLE:

Preparation of amino acid and peptide derivatives as

INVENTOR(S):

microbial efflux pump inhibitors.
Chamberland, Suzanne; Ishida, Yohei; Lee, Ving J.; Leger, Roger; Nakayama, Kiyoshi; Ohta, Toshiharu; Ohtsuka, Masami; Renau, Thomas W.; Watkins, William

J.; Zhang, Zhijia J.

PATENT ASSIGNEE(S):

Microcide Pharmaceuticals, Inc., USA; Daiich

Pharmaceutical Co., Ltd.

SOURCE:

PCT Int. Appl., 387 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

<09/25/2002 Habte

09/910,141 Page 95

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

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PATENT NO.
                        KIND
                              DATE
                                              APPLICATION NO.
                                                                 DATE
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                                              -----
      WO 2000001714
                        A1
                              20000113
                                              WO 1999-US14871 19990629
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
              DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
              JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
              TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
              ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
              CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6399629
                              20020604
                        B1
                                             US 1998-108906
                                                                19980701
     AU 9952073
                              20000124
                        A1
                                              AU 1999-52073
                                                                19990629
PRIORITY APPLN. INFO.:
                                           US 1998-108906
                                                            Α
                                                                19980701
                                           US 1998-87514P
                                                             Ρ
                                                                19980601
                                          WO 1999-US14871 W 19990629
OTHER SOURCE(S):
                          MARPAT 132:93658
GΙ
```

AB A method for treating a microbial infection comprises administration of title compds. [I; Q1 = (CH2)n1; Q2 = (CH2)n2; Q3 = (CH2)n3; n1 = 0, 1; n2 = 0-3; n3 = 0-2; n1+n2+n3 = 1-4; X = N, CR2a, CR2b; R2a = H, alkyl; R2b = OH, F; Y = bond, S, O, NR23; R23 = H, alkyl; R1, R2 = H, C(:NR)R', etc.; R, R', R' = H, alkyl; Z = bond, (CHR4)nCONR4, Q, etc.; R4 = H, alkyl, aralkyl; n = 0-3; A = bond, (CHR5)nX1(CHR5)n; X1 = OH, alkyl; R1 = OH, alkyl; R2 = OH, alkyl; R1 = OH, alkyl; R1

S, bond, cycloalkylene, heterocycloalkylene; R5 = H, alkyl; R3 = H,
 (substituted) aryl, tetrahydronaphthyl, indanyl, thienyl, furyl, pyridyl,
 quinolyl, cycloalkyl, etc.; with provisos]. Thus,
1-(trans-4-aminomethyl-

L-prolyl)-4-(3-chloro-2-methylphenyl)piperazine (soln. phase prepn.

at 2.5 .mu.g/mL together with levofloxacin 0.25 .mu.g/mL gave 100% inhibition of Pseudomonas aeruginosa PAM1001 growth.

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09/910,141 Page 96

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amino acid and peptide derivs. as microbial efflux pump inhibitors)

RN 254881-29-3 CAPLUS

CN Acetamide, 2-amino-N-[(3R,5S)-5-[[4-(3-quinolinylcarbonyl)-1-piperazinyl]carbonyl]-3-pyrrolidinyl]-, trihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● 3 HCl

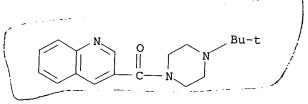
IT 254883-32-4P 254883-34-6P 254883-35-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of amino acid and peptide derivs. as microbial efflux pump inhibitors)

RN 254883-32-4 CAPLUS

CN Piperazine, 1-(1,1-dimethylethyl)-4-(3-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)



RN 254883-34-6 CAPLUS

CN Piperazine, 1-(3-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)

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<09/25/2002

Page 97 09/910,141

254883-35-7 CAPLUS RN 1-Pyrrolidinecarboxylic acid, 4-[[[[(1,1-dimethylethoxy)carbonyl]amino]ace tyl]amino]-2-[[4-(3-quinolinylcarbonyl)-1-piperazinyl]carbonyl]-, 1,1-dimethylethyl ester, (2S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS 5 REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 19 OF 45 CAPLUS COPYRIGHT 2002 ACS

1999:233901 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 130:296694

Preparation of heterocyclic compounds having the TITLE:

sulfonyl group as antithrombotics

Kobayashi, Shozo; Komoriya, Satoshi; Ito, Masayuki; INVENTOR(S):

Nagata, Tsutomu; Mochizuki, Akiyoshi; Haginoya, Noriyasu; Nagahara, Takayasu; Horino, Haruhiko

Daiichi Pharmaceutical Co., Ltd., Japan

PATENT ASSIGNEE(S):

PCT Int. Appl., 342 pp. SOURCE:

CODEN: PIXXD2

Patent DOCUMENT TYPE:

Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	ENT 1	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	o. 	DATE					
WO	9916	747		A.	1	1999	0408		W	o 19	98-J	P441	1	1998	0930				
***	W:	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,		
		DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IS,	JP,	ΚE,		
		KG,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,		
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,		
		UA,	UG,	US,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM		
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	ŪG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,		
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,		
		CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG								
CA	2304	285						*	CA 1998-2304285 19980930										
AU	9892	806		Α	1	1999	0423		AU 1998-92806 19980930										

EP 1031563 A1 20000830 EP 1998-945542 19980930 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI BR 9815377 20010116 BR 1998-15377 19980930 NO 2000001636 A 20000329 NO 2000-1636 20000329 PRIORITY APPLN. INFO.: JP 1997-267117 A 19970930 WO 1998-JP4411 W 19980930 OTHER SOURCE(S): MARPAT 130:296694 GT

AB The title compds. I [R1 is hydrogen, hydroxyl, nitro or the like; R2 and R3 are each independently hydrogen, halogeno or the like; R4 and R5 are each independently hydrogen, halogeno or the like; Q1 is an optionally substituted satd. or unsatd. 5- or 6-membered cyclic hydrocarbon group or the like; Q2 is a single bond, oxygen or the like; Q3 is a heterocyclic moiety (represented by 4 generic structures); T1 is carbonyl or the like; and X1 and X2 are each independently methine or nitrogen are prepd. I speedily exert satisfactory and persistent antithrombotic effects through oral administration and cause few adverse effects. In an in vitro test for inhibition of activated blood coagulation factor X, 1-[(6-chloronaphthalen-2-yl)sulfonyl]-4-[(6-methyl-4,5,6,7-tetrahydrothiazolo[5,4-c]pyridin-2-yl)carbonyl]piperazine hydrochloride showed the Ki value of 6.6 nM.

Ι

IT 222985-50-4P 222985-51-5P 222985-52-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of heterocyclic compds. having the sulfonyl group as antithrombotics)

RN 222985-50-4 CAPLUS

CN Piperazine,

1-[(6-chloro-2-naphthalenyl)sulfonyl]-4-(2-quinolinylcarbonyl), monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 222985-51-5 CAPLUS

CN Piperazine, 1-[(6-chloro-2-naphthalenyl)sulfonyl]-4-[(4-hydroxy-2-quinolinyl)carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 222985-52-6 CAPLUS

CN Piperazine, 1-[(6-chloro-2-naphthalenyl)sulfonyl]-4-[(8-hydroxy-7-quinolinyl)carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

REFERENCE COUNT:

THIS

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR

Habte

<09/25/2002

Page 100 09/910,141

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:27676 CAPLUS DOCUMENT NUMBER: 130:81422

DOCUMENT NUMBER:

TITLE:

Quinoline-indole antimicrobial agents

INVENTOR(S):

Kumaravel, Gnanasambandam; Hoemann, Michael Z.; Melikian-Badalian, Anita; Cuny, Gregory D.; Hauske,

James R.; Heefner, Donald L.; Rossi, Richard F.

PATENT ASSIGNEE(S):

SOURCE:

Sepracor, Inc., USA PCT Int. Appl., 146 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PA	PATENT NO.					DATE			A.	PPLI	CATIO). 	DATE				
 W0	9857931			A2	A2 19981223 A3 19990429				W	5 19	19980	618					
WO	W:	AL, EE, KR, PL, US,	AM, ES, KZ, PT, UZ,	AT, FI, LC, RO, VN,	AU, GB, LK, RU, YU,	AZ, GE, LR, SD, ZW,	BB, GH, LS, SE, AM,	BM, LT, SG, AZ,	LU, SI, BY,	LV, SK, KG,	MD, SL, KZ,	MG, TJ, MD, BE,	MN, TM, RU, CH,	CU, JP, MW, TR, TJ, CY, BJ,	MX, TT, TM DE,	NO, UA, DK,	NZ, UG,
	6207 9916 R:	CM, 679 23 AT,	GA, BE,	GN, B	ML 1	, MR, 2001	NE, 0327	SN,	TD, U	TG S 19 P 19	98-4 98-9	5051 3039	6		0319 0618		
JI NC RIORIT	2002 9906 Y APE	269	89	Α	2	2000	0219		us 1 us 1 us 1 wo 1	0 19 .997- .998-	99-6 8787 4505	269 81 1	A A2	1998 1999 1997 1998 1998	1217 0619 0319		

OTHER SOURCE(S): MARPAT 130:81422

GΙ

$$R^{1}$$
 R^{3}
 R^{6}
 R^{7}
 R^{7}
 R^{7}
 R^{1}
 R^{2}
 R^{7}
 R^{7

Indolylquinolines I [X = (un)substituted CH, N, N(O), P, As; Y = (un)substituted CH2, NH, O, Ph, S, AsH, Se; R1-R3 = H, halogen, alkyl, alkenyl, alkynyl, OH, alkoxy, silyloxy, NH2, NO2, SH, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, CO, CO2H, CONH2, anhydride, silyl, alkylsulfonyl, alkylseleno, aldehyde, ester, heteroalkyl, CN, epoxide, C(:NH)OH, oxime, SO2NH2, CSNH2, Urea, thiourea; R4R5, R6R7 = atoms required to complete a moncyclic or polycyclic ring system] were prepd. individually or by combinatorial synthesis for use as bactericides. Thus, 4-H2NC6H4CO2H was esterified, N-tert-butoxycarbonylated, reduced and treated with iodine to give 4-BocNHC6H4CH2I which was coupled with the indolylquinolinemethanol fragment and deblocked to give the product II. II had MIC's <7 .mu.g/mL against methicillin-resistant Staphylococcus aureus, vancomycin-resistant Enterobacter sp., and Streptococcus pneumoniae.

210698-12-7P 218463-01-5P 218463-13-9P 218463-16-2P 218463-17-3P 218463-19-5P 218463-32-2P 218463-41-3P 218463-49-1P 218463-50-4P 218463-51-5P 218463-52-6P 218463-53-7P 218463-54-8P 218463-55-9P 218463-56-0P 218464-15-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of indolylquinoline bactericides)

RN 210698-12-7 CAPLUS

CN Piperazine, 1-[[2-(1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX

NAME)

RN 218463-01-5 CAPLUS
CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI)
(CA INDEX NAME)

RN 218463-13-9 CAPLUS CN Piperazine, 1-[(2-tricyclo[3.3.1.13,7]dec-1-yl-4-quinolinyl)carbonyl]-(9CI) (CA INDEX NAME)

RN 218463-16-2 CAPLUS

CN 1-Piperazineacetic acid, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-.alpha.-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 218463-17-3 CAPLUS

CN Piperazine,

1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-methyl-(9CI) (CA INDEX NAME)

RN 218463-19-5 CAPLUS

CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 218463-32-2 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 218463-41-3 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-iodo-4-quinolinyl]carbonyl]-(9CI) (CA INDEX NAME) 09/910,141 Page 105

RN 218463-49-1 CAPLUS

CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 218463-50-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 218463-51-5 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-52-6 CAPLUS

09/910,141 Page 107

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-53-7 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-y1)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-54-8 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

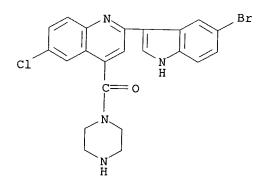
RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-56-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 218464-15-4 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-chloro-4-quinolinyl]carbonyl]-(9CI) (CA INDEX NAME)



L5 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:9834 CAPLUS

DOCUMENT NUMBER: 130:81421

TITLE: Preparation of indolyl(iso)quinolines as

bactericides

INVENTOR(S): Kumaravel, Gnanasambandam; Hoemann, Michael Z.;

Melikian-Badalian, Anita; Cuny, Gregory D.; Hauske,

Page 110

James R.; Heefner, Donald L.; Rossi, Richard F.

PATENT ASSIGNEE(S): Sepracor Inc., USA

SOURCE: PCT Int. Appl., 138 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PA	PATENT NO.				ND	DATE				PPLI	CATI	ON N	ο.	DATE			
WO	WO 9857952								WO 1998-US12706 199						0618		
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KE,	KG,
		KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,
		NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
		UA,	UG,	US,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
		CM,	GΑ,	GN,	ML,	MR,	ΝE,	SN,	TD,	ΤG							
AU	9882	586		A	1	1999(0104		JΑ	J 19	98-82	2586		1998	0618		
PRIORITY	Y APP	LN.	INFO	. :				Ī	JS 19	997-	87878	31	A2	1997	0619		
								1	WO 19	998-t	JS12'	706	W	1998	0618		
OTHER SOURCE(S): M						PAT 1	130:8	3142	1								

OTHER SOURCE(S): MARPAT 130:81421

$$R^7$$
 X
 R^8
 R^1
 R^3
 R^2
 R^3
 R^4
 R^4

AB Title compds. [I; X = CR, N, NO, P, As; Y = CR2, NR, O, PR, S, AsR, Se; R,R1-R3 = H, halo, alkyl, alkoxy, etc.; R4R5,R6R7 = atoms to complete (un)substituted rings] were prepd. Thus, solid-phase synthesis of a 1-(3-indolyl)isoquinoline-3-aminoalkylcarboxamide was described. Data for

biol. activity of I were given.
IT 210698-12-7P 218463-01-5P 218463-13-9P

218463-16-2P 218463-17-3P 218463-19-5P 218463-32-2P 218463-41-3P 218463-49-1P

218463-50-4P 218463-51-5P 218463-52-6P 218463-53-7P 218463-54-8P 218463-55-9P

218463-56-0P 218464-15-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of indolyl(iso)quinolines as bactericides)

RN 210698-12-7 CAPLUS

CN Piperazine, 1-[[2-(1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX

Habte

NAME)

RN 218463-01-5 CAPLUS CN Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 218463-13-9 CAPLUS
CN Piperazine, 1-[(2-tricyclo[3.3.1.13,7]dec-1-yl-4-quinolinyl)carbonyl](9CI) (CA INDEX NAME)

RN 218463-16-2 CAPLUS

CN 1-Piperazineacetic acid, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-.alpha.-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 218463-17-3 CAPLUS

CN Piperazine,

1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-methyl-(9CI) (CA INDEX NAME)

RN

218463-19-5 CAPLUS Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-(4-CNfluorophenyl) - (9CI) (CA INDEX NAME)

RN

218463-32-2 CAPLUS
Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-4-CN (phenylmethyl) - (9CI) (CA INDEX NAME)

218463-41-3 CAPLUS

Piperazine, 1-[[2-(5-bromo-1H-indol-3-yl)-6-iodo-4-quinolinyl]carbonyl]-CN (9CI) (CA INDEX NAME)

RN

218463-49-1 CAPLUS
Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME) CN

Habte

PAGE 1-B

RN 218463-50-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 218463-51-5 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Habte

<09/25/2002

.RN 218463-52-6 CAPLUS
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-53-7 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-lH-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-54-8 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

Habte

<09/25/2002

RN 218463-56-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2002 ACS

2

ACCESSION NUMBER:

1998:435156 CAPLUS

DOCUMENT NUMBER:

129:136082

TITLE:

Solid-phase synthesis of substituted quinoline and isoquinoline derivatives using heterocyclic

N-oxide chemistry

AUTHOR(S):

Hoemann, Michael Z.; Melikian-Badalian, Anita;

Kumaravel, G.; Hauske, James R.

CORPORATE SOURCE: SOURCE:

Sepracor Inc., Marlborough, MA, 01752, USA Tetrahedron Letters (1998), 39(27), 4749-4752

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal English

LANGUAGE:
OTHER SOURCE(S):

CASREACT 129:136082

AB Using heterocyclic-N-oxide chem., various substituted quinoline

and isoquinoline compds. were synthesized on a solid support in excellent purity and good to excellent yield. E.g., quinoline -4-carboxylic acid was attached to Wang resin using PyBOP coupling conditions. The resin bound quinoline was N-oxidized with m-CPBA, then sequentially treated with PhCOCl and indole. Cleavage from the resin gave an 83% yield of 2-(3-indolyl)-4-quinoline -4-carboxylic acid.

IT 210698-12-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (solid-phase synthesis of quinolines and isoquinolines using heterocyclic N-oxide chem.)

RN 210698-12-7 CAPLUS

CN Piperazine, 1-[[2-(1H-indol-3-yl)-4-quinolinyl]carbonyl]-(9CI) (CA INDEX

NAME)

L5 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1998:220858 CAPLUS

DOCUMENT NUMBER:

128:270614

TITLE:

Preparation of acylpiperazines and related compounds

as inhibitors of farnesyl-protein transferase.

INVENTOR(S):

Graham, Samuel L.; Williams, Theresa M.

Habte

<09/25/2002

Page 122 09/910,141

Merck and Co., Inc., USA PATENT ASSIGNEE(S):

U.S., 50 pp., Cont.-in-part of U.S. Ser. No. 237,586, SOURCE:

abandoned. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KI					ND	DATE			APPLICATION NO. DATE								
	US 5736539 A WO 9500497 A				19980407 L 19950105			_					1995 1994				
														KG,		KZ,	LK,
		LV,	MD,	MG,	MN,	MW,	NO,	NZ,	PL,	RO,	RU,	SD,	SI,	SK,	ТJ,	TT,	UA,
		US,	US,	UZ													
	RW:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,
		BF,	•	•	•	•	•	GA,	•					TD,			
ZA	9404	326		Α		1995	1214		Z	A 19	94-4	326		1994	0617		
PRIORIT	Y APP	LN.	INFO	. :				Ī	US 1	993-	8002	В		1993	0618		
								1	US 1	994-	2375	86		1994	0511		
								Ţ	wo 1	994-1	US56:	34		1994	0519		
OTHER SOURCE(S):					MAR	PAT	128:2	2706	14								

GΙ

$$R^2$$
 R^3
 R^4
 R^5
 R^5

Title compds. e.g., [I; X = 0, H2; m = 1, 2; n = 0, 1; t = 1, 4; R, R1 =AB H, alkyl, aralkyl; R2-R5 = H, (substituted) alkyl, alkenyl, alkynyl, aryl,

heterocyclyl, acyl; Y = (substituted) aryl, heterocyclyl], were prepd. Thus, 1-[2(R)-amino-3-mercaptopropyl]-2(S)-[2-(3-pyridylmethoxy)ethyl]-4-(1-naphthoyl)piperazine trihydrochloride (prepn. given) inhibited RAS farnesylation with IC50 = 1 nM.

169448-28-6P 169448-43-5P 169449-21-2P 169449-28-9P 169449-29-0P 187268-12-8P

187268-15-1P 205678-89-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of acylpiperazines and related compds. as inhibitors of farnesyl-protein transferase)

RN 169448-28-6 CAPLUS

1-Piperazinepropanethiol, .beta.-amino-2-(2-propoxyethyl)-4-(8-CN

quinolinylcarbonyl)-, trihydrochloride, $[S-(R^*,S^*)]-(9CI)$ (CA INDEX NAME)

Absolute stereochemistry.

● 3 HCl

RN 169448-43-5 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-butyl-4-(8-quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

RN 169449-21-2 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-butyl-4-(4-quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● 3 HCl

RN 169449-28-9 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-butyl-4-(5-quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

RN 169449-29-0 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-(3-ethoxypropyl)-4-(8- . quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● 3 HCl

RN 187268-12-8 CAPLUS
CN 1-Piperazinepropanethiol, .beta.-amino-2-butyl-4-(8-quinolinylcarbonyl)-,
 [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187268-15-1 CAPLUS
CN 1-Piperazinepropanethiol, .beta.-amino-2-(2-propoxyethyl)-4-(8-quinolinylcarbonyl)-, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 205678-89-3 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-(2-methoxyethyl)-4-(8-quinolinylcarbonyl)-, tetrahydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

•4 HCl

IT 169448-25-3P 169448-26-4P 169448-27-5P 169448-41-3P 169448-42-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of acylpiperazines and related compds. as inhibitors of farnesyl-protein transferase)

RN 169448-25-3 CAPLUS

N 1-Piperazinecarboxylic acid,

2-(2-hydroxyethyl)-4-(8-quinolinylcarbonyl)-,

1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169448-26-4 CAPLUS

CN 1-Piperazinecarboxylic acid,

2-(2-propoxyethyl)-4-(8-quinolinylcarbonyl)-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169448-27-5 CAPLUS

CN Carbamic acid, [1-[[2-(2-propoxyethyl)-4-(8-quinolinylcarbonyl)-1-piperazinyl]methyl]-2-[(triphenylmethyl)thio]ethyl]-, 1,1-dimethylethyl ester, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169448-41-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 2-butyl-4-(8-quinolinylcarbonyl)-,
1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

L5 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1998:180848 CAPLUS

DOCUMENT NUMBER:

128:243960

TITLE:

8-Hydroxy-7-substituted quinolines as

anti-viral agents

INVENTOR(S):

Vaillancourt, Valerie A.; Romines, Karen R.; Romero,

Arthur G.; Tucker, John A.; Strohbach, Joseph W.; Bezencon, Olivier; Thaisrivongs, Suvit; et al.

PATENT ASSIGNEE(S):

Pharmacia & Upjohn Co., USA; Vaillancourt, Valerie

A.;

Romines, Karen R.; Romero, Arthur G.; Tucker, John

A.;

Strohbach, Joseph W.; Bezencon, Olivier;

Thaisrivongs,

Suvit

SOURCE:

PCT Int. Appl., 280 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	rent	NO.		KI	ND	DATE			A	PPLI	CATI	ON N	э.	DATE				
WO	9811	073		A1 19980319				WO 1997-US15310 19						70905				
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	HU,	ID,	IL,	IS,	JP,	KE,	KG,	KP,	KR,	
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	UA,	UG,	
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		GN,	ML,	MR,	ΝE,	SN,	TD,	TG										
ΑU	9741	721		A	1	1998	0402		AU 1997-41721 19970905									
EΡ	9271	64		A.	1	1999	0707		E	P 19	97-9	3969)	1997	0905			
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO											
US	6310	211		B:	1	2001	1030		U:	3 19	97-9	24683	3	1997	0905			

20020219 JP 1998-513685 19970905 JP 2002505660 Т2 US 6211376 В1 20010403 US 1999-425789 19991022 US 6252080 В1 20010626 US 1999-425564 19991022 19960910 PRIORITY APPLN. INFO.: US 1996-25870P Ρ US 1997-50720P P 19970625 US 1997-924683 A3 19970905 WO 1997-US15310 W 19970905 MARPAT 128:243960

OTHER SOURCE(S):

AB The present invention provides for 8-hydroxy-7-substituted quinoline compds. I (R = alkyl, alkylamino, alkoxyalkyl, etc.; R1 = H, F, Cl, Br, Cf3, etc.; R2 = H, alkyl, OH, arylalkenyl, etc.; R3 = H, OH, CF3, C1-C3alkyl) are prepd. as anti-viral agents. Specifically, these

compds. have anti-viral activity against the herpes virus, cytomegalovirus

(CMV). Many of these compds. are also active against other herpes viruses, such as the varicella zoster virus, the Epstein-Barr virus, the herpes simplex virus and the human herpes virus type 8 (HHV-8).

IT 205040-35-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of 8-hydroxy-7-substituted quinolines as anti-viral

(preph. of 8-hydroxy-7-substituted **quinolines** as anti-viral agents)

RN 205040-35-3 CAPLUS

CN Piperazine, 1-(3,4-dichlorophenyl)-4-[(8-hydroxy-7-quinolinyl)carbonyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & OH \\ \hline \\ N & C \\ \hline \end{array}$$

L5 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:178811 CAPLUS

DOCUMENT NUMBER: 126:171597

TITLE: Preparation of imidazo[1,5-a]quinolines as

neuroprotective agents

INVENTOR(S): Carter, Donald B.

PATENT ASSIGNEE(S): Upjohn Co., USA; Carter, Donald B.

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	rent :	NO.		KIND DATE APPLICATION NO. DATE													
	WO	9700	074		A1 19970103				WO 1996-US7952						19960531			
		W:	AL,	AM,	ΑT,	AU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,
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1			LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,
			SI,	SK														
		RW:	KE,	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,
MR																		
	AU	9660	660259												1996			
	EP	8336	38		A1 19980408				E	P 19	96-9	1785	5	1996	0603			
	ΕP	8336	38		B1 20			20011121										
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	ΝL,	SE,	MC,	PT,
				SI,														
		5935																
	JP	2001	5180	56	T	2	2001	1009		J	P 19	97-5	0309	0	1996	0603		
		2090																
	ES	2167	569		Т	3	2002	0516										
PRIO	RIT	Y APP	LN.	INFO	.:										1995			
											996-	US79.	52	W	1996	0531		
OTHE	R S	OURCE	(S):			MAR	PAT	126:	1715	97								

$$R^7$$
 R^4
 R^6
 R^5
 R^3

GI

AB The title compds. [I; R3 = COOH, COOC1-6 alkyl, (un)substituted Ph, etc.; R4 = H, C1-4 alkyl, CF3; R5 = C1-6 alkyl, pyrrolidino, morpholino, etc.;

R6, R7 = H, halo, CN, etc.], useful in treating chronic neurodegenerative diseases such as amyotrophic lateral sclerosis, Parkinson's disease, dementia of the Alzheimer type, Wilson's disease, Huntington's disease, Guam degeneration (Lytico Bodig), progressive supranuclear palsy, Pick's disease, Hallervorden-Spatz syndrome, Creutzfeld-Jacob disease, Gerstmann-Straussler Scheinker syndrome, Kuru and corticobasal ganglionic degeneration, were prepd. Thus, treatment of pyrrolidino 2-hydroxyguinoline-4-carboxamide in DMF with tBuOK/THF followed by addn. of di-Et chlorophosphate, 3-isocyanomethyl-5-cyclopropyl-1,2,4-oxadiazole, and tBuOK/THF afforded I [R3 = 5-cyclopropyl-1,2,4-oxadiazol-3-yl; R4, R6, R7 = H; R5 = pyrrolidino]. Compds. I are effective at 1-4 mg/kg/day. IT 170568-75-9P 170568-77-1P 170568-78-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of imidazo[1,5-a]quinolines as neuroprotective agents) 170568-75-9 CAPLUS RN 1-Piperazinecarboxylic acid, 4-[(2,6-dichloro-4-quinolinyl)carbonyl]-, CN 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 170568-77-1 CAPLUS
CN Piperazine, 1-cyclopropyl-4-[(2,6-dichloro-4-quinolinyl)carbonyl]- (9CI)
(CA INDEX NAME)

RN 170568-78-2 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(2,6-dichloro-4-quinolinyl)carbonyl]-2-methyl-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L5 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1996:713016 CAPLUS

DOCUMENT NUMBER:

126:8138

TITLE:

Preparation of tricyclic compounds as farnesyl

protein

transferase inhibitors

INVENTOR(S):

Doll, Ronald J.; Mallams, Alan K.; Afonso, Adriano; Rane, Dinanath F.; Rossman, Randall R.; Njoroge, F.

George

PATENT ASSIGNEE(S):

Schering Corporation, USA PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

<09/25/2002

Habte

PATENT INFORMATION:

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PATENT NO.
                KIND DATE
                                APPLICATION NO. DATE
                         _____
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    WO 9631477 A1
        W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, JP,
           KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO,
           RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ,
           MD, RU
        RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
           IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
           MR, NE, SN, TD, TG
                         19980127
                                      US 1995-418973
    US 5712280
                   Α
                                                      19950407
                                      US 1995-446265
    US 5672611
                         19970930
                                                      19950522
                    Α
                                      CA 1996-2217477 19960403
    CA 2217477
                         19961010
                    AΑ
                                      AU 1996-54328
    AU 9654328
                    A1
                         19961023
                                                      19960403
                                      EP 1996-911442
    EP 819120
                    A1
                         19980121
                                                      19960403
          AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, LT, LV, FI
    JP 10511980
                   Т2
                         19981117
                                      JP 1996-530363
                                                     19960403
    JP 2999556
                    B2
                         20000117
                                                  A 19950407
PRIORITY APPLN. INFO.:
                                    US 1995-418973
                                    WO 1996-US4171 W 19960403
OTHER SOURCE(S): MARPAT 126:8138
GT
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- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB The title compds. [I; R1 = II, III, IV; R2 = H, C1-8 alkyl, C2-8 alkenyl, etc.; R3, R4 = H, halo, C1-6 alkyl; W = CH (when the optional bond is present), O, S, CH2; X = CH, N; Y = N, CH], useful for inhibiting Ras function and therefore inhibiting the abnormal growth of cells, were prepd. and formulated. Thus, reaction of the tricyclic compd. V with (R)-Ph3CSCH2(CHO)NHBoc in the presence of sodium triacetoxyborohydride,
- 4A mol. sieves, Et3N in DMF followed by deprotection afforded the expected product VI which showed IC50 of 10-100 .mu.M against FPT.
- IT 183610-85-7P
- RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 - study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (prepn. of tricyclic compds. as farnesyl protein transferase inhibitors)
- RN 183610-85-7 CAPLUS
- CN Piperazine, 1-[(8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)carbonyl]-4-(8-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1995:958518 CAPLUS

DOCUMENT NUMBER:

124:146212

TITLE:

8-Chloro-10,11-dihydro-10-(1-

piperazinylcarbonyl)dibenz[b,f][1,4]oxazepine

derivatives and analogs as analgesics and

prostaglandin-E2 antagonists

INVENTOR(S):

Hansen, Donald W., Jr.; Peterson, Karen B.

PATENT ASSIGNEE(S):

G. D. Searle and Co., USA

SOURCE:

U.S., 38 pp. Cont.-in-part of U.S. 5,354,747.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.					DATE			A.	PPLI	CATI	ои ис	o. 	DATE			
US	5461	047		A		1995	1024		U	s 19	94-2	4534	9	1994	0518		
	5354					1994	1011		U	s 19	93-7	9021		1993	0616		
WO	9429					1994	1222		W	0 19	94-U	S602	9	1994	0602		
	W:	AT.	AU.	BB.	BG.	BR.	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	ES,	FI,	GB,	HU,
		JP.	KP.	KR.	KZ,	LK.	LU,	LV,	MG,	MN,	MW,	NL,	NO,	NZ,	PL,	PT,	RO,
						sĸ,						-					
	RW:											IT,	LU,	MC,	NL,	PT,	SE,
		BF.	BJ.	CF.	CG.	CI.	CM.	GA.	GN.	ML,	MR,	NE,	SN,	TD,	TG		
CA	2165		24,			1994		•	Ċ.	A 19	94-2	1651	59	1994	0602		
	9471													1994			
	7039																
51														LU,			SE
JT.	0950					1997		,	J	P 19	94-5	0187	4	1994	0602		
PRIORIT					_	,					7902			1993			

US 1994-245349 WO 1994-US6029 19940518 19940602

OTHER SOURCE(S):

MARPAT 124:146212

GI

Y

$$A \longrightarrow Z$$
 $CH_2 \setminus m \longrightarrow W$
 $CH_2 \setminus m \longrightarrow W$

AB The present invention provides substituted dibenzoxazepine and dibenzothiazepine compds. I or a pharmaceutically-acceptable salt thereof,

wherein: W = (H)r; Q = [CH(R)q]t; X is oxygen, sulfur, SO, or SO2; Y is hydrogen, halogen or hydroxy; Z is hydrogen or halogen; A is alkylene or carbonyl; B is CH or nitrogen; D is carbon or nitrogen; E is alkylene, carbonyl, alkyleneamino or alkylenecarbonyl; G is hydrogen, alkyl, cycloalkyl, alkoxy, aminoalkyl, aminocycloalkyl, aryl, alkylenearyl or aryl-substituted aryl; R is hydrogen or CO2R1; R1 is hydrogen or alkyl;

m
 is an integer of from 0 to 4; n is an integer of from 0 to 4; r is 0 or
1;

q is an integer of from 0 to 1; t is an integer of from 0 to 1; and p is an integer of from 0 to 1 (with provisos) which are useful as analgesic agents for the treatment of pain, and for prostaglandin-E2 mediated diseases. Thus, e.g., 10,11-dihydro-10-[[4-(2-phenylethyl)-1-piperazinyl]carbonyl]dibenz[b,f][1,4]oxazepine, monohydrochloride (II.HCl)

was synthesized by reductive alkylation of 8-chloro-10,11-dihydro-10-(1-piperazinylcarbonyl)dibenz[b,f][1,4]oxazepine, monohydrochloride (prepn. given) with phenylacetaldehyde, and exhibited analgesic activity of 10/10

in the writhing assay and prostaglandin-E2 antagonism with dose ratio of EC50 doses = 2.6.

163839-47-2P IT

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(8-chloro-10,11-dihydro-10-(1-piperazinylcarbonyl)dibenz[b,f][1,4]oxaze pine derivs. and analogs as analgesics and prostaglandin-E2 antagonists)

163839-47-2 CAPLUS RN

Dibenz[b,f][1,4]oxazepine, 8-chloro-10,11-dihydro-10-[[4-(6-CN quinolinylcarbonyl)-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)

ANSWER 28 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1995:931242 CAPLUS

DOCUMENT NUMBER:

123:340118

TITLE:

Imidazo[1,5-a]quinolines for treatment of

anxiety and sleep disorders

INVENTOR(S):

Jacobsen, Eric Jon; Ten Brink, Rugh Elizabeth

PATENT ASSIGNEE(S):

Upjohn Co., USA PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

1

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9514020	A1	19950526	WO 1994-US12197	19941027

<09/25/2002

Habte

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AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
             GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG,
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         RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
             MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,
             TD, TG
     CA 2174106
                        AA
                             19950526
                                            CA 1994-2174106
                                                              19941027
     AU 9480896
                             19950606
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                        Α1
     AU 683507
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                       A1
                             19960904
                                            EP 1994-932018
                                                              19941027
     EP 729469
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         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,
SE
     CN 1135753
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                             19961113
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     US 35840
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                                                              19970617
PRIORITY APPLN. INFO.:
                                         US 1993-155405
                                                           А
                                                              19931119
                                                              19940513
                                         US 1994-242556
                                                           Α
                                                              19941027
                                         WO 1994-US12197
                                                           W
                                                           A5 19960513
                                         US 1996-640973
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OTHER SOURCE(S):

MARPAT 123:340118

GΙ

$$R^7$$
 R^4
 R^6
 CO
 R^4
 R^6
 R^6

AB Imidazo[1,5-a]quinolines I are claimed [wherein R3 = CO2H or esters, CHO, alkanoyl, aroyl, (un)substituted Ph, oxadiazolyl, isoxazolyl;

R4 = H, alkyl, CF3; R5 = alkyl, (un)substituted Ph, OH, (un)substituted alkoxy or PhO, (un)substituted (a)cyclic amino; R6 = H, F, Br, alkyl, cyano, nitro, (un)substituted alkoxy, CO2H or esters, (un)substituted CONH2, etc.; R7 = H, F, Br, iodo, alkyl, cyano, nitro, CO2H or esters, (un)substituted CONH2, etc.]. Twenty-one specific compds. are claimed

and

prepd. I are useful for treatment of anxiety, sleep disorders, panic states, convulsions, and muscle disorders (no data). For example, 2-hydroxyquinoline-4-carboxylic acid was treated with HCl in MeOH to give

its Me ester, which reacted with pyrrolidine in THF at 80.degree. to give the corresponding pyrrolidine amide. Reaction of this compd. with KOBu-tert, followed by ClP(O)(OEt)2, then

3-(isocyanomethyl)-5-cyclopropyl-

1,2,4-oxadiazole and addnl. KOBu-tert, gave title compd. II.

IT 170568-75-9P 170568-77-1P 170568-78-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of imidazoquinolines as anxiolytics and sedatives)

RN 170568-75-9 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(2,6-dichloro-4-quinolinyl)carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 170568-77-1 CAPLUS

CN Piperazine, 1-cyclopropyl-4-[(2,6-dichloro-4-quinolinyl)carbonyl]- (9CI) (CA INDEX NAME)

RN 170568-78-2 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(2,6-dichloro-4-quinolinyl)carbonyl]-2-methyl-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L5 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:881293 CAPLUS

DOCUMENT NUMBER: 123:286080

TITLE: Preparation of .alpha.-(mercaptoalkyl)-1-

piperazineethanamines as inhibitors of

farnesyl-protein transferase

INVENTOR(S): Graham, Samuel L.; Williams, Theresa M.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA SOURCE: PCT Int. Appl., 156 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	ENT	NO.		KI	ND	DATE			A	PPLI	CATI	ON N	0.	DATE			
WO	9500	 497		 A	 1	 1995	0105		W	0 19	94-U	s563	4	1994	0519		
	W:	AU,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	FI,	GΕ,	HU,	JΡ,	KG,	KR,	ΚZ,	LK,
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		US,	US,	UZ													
	RW:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	ΝL,	PT,	SE,
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CA	2165	176		A	Α	1995	0105		C	A 19	94-2	1651	76	1994	0519		
ΑU	9470	412		A.	1	1995	0117		Αl	U 19	94-7	0412		1994	0519		
AU	6751	45		B.	2	1997	0123										
ΕP	7039	05		A	1	1996	0403		E.	P 19	94-9	1917	4	1994	0519		
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JP	0950	0109		T	2	1997	0107		J.	P 19	94-5	0281	0	1994	0519		
ZΑ	9404	326		Α		1995	1214		\mathbf{z}_{i}	A 19	94-4	326		1994	0617		
US	5736	539		Α		1998	0407		U	s 19	95-5	4982	9	1995	1116		

PRIORITY APPLN. INFO::

US 1993-80028 19930618
US 1994-237586 19940511
WO 1994-US5634 19940519

OTHER SOURCE(S): MARPAT 123:286080

GΙ

AB Compds. which inhibit farnesyl-protein transferase (FTase) and the farnesylation of the oncogene protein Ras were disclosed. More narrowly defined claimed compds. are .alpha.-(mercaptomethyl)-1-piperazineethanamines I (Y = Ph, aryl, furanyl, etc.; R1-R4 = H, alkyl, substituent, etc.). The invention is further directed to chemotherapeutic

compns. contg. the compds. of this invention and methods for inhibiting farnesyl-protein transferase and the farnesylation of the oncogene protein

Ras.

IT 169448-25-3P 169448-26-4P 169448-27-5P 169448-41-3P 169448-42-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of .alpha.-(mercaptoalkyl)-1-piperazineethanamines farnesyl-protein transferase inhibitors)

RN 169448-25-3 CAPLUS

CN 1-Piperazinecarboxylic acid,

2-(2-hydroxyethyl)-4-(8-quinolinylcarbonyl)-,

1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169448-26-4 CAPLUS
CN 1-Piperazinecarboxylic acid,
2-(2-propoxyethyl)-4-(8-quinolinylcarbonyl)-,
1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169448-27-5 CAPLUS

CN Carbamic acid, [1-[[2-(2-propoxyethyl)-4-(8-quinolinylcarbonyl)-1-piperazinyl]methyl]-2-[(triphenylmethyl)thio]ethyl]-, 1,1-dimethylethylester, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Habte

RN 169448-41-3 CAPLUS

CN 1-Piperazinecarboxylic acid, 2-butyl-4-(8-quinolinylcarbonyl)-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169448-42-4 CAPLUS

CN Carbamic acid,

[1-[[2-butyl-4-(8-quinolinylcarbonyl)-1-piperazinyl]methyl]2-[(triphenylmethyl)thio]ethyl]-, 1,1-dimethylethyl ester, [S-(R*,S*)](9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 169448-28-6P 169448-43-5P 169449-21-2P 169449-27-8P 169449-28-9P 169449-29-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of .alpha.-(mercaptoalkyl)-1-piperazineethanamines
farnesyl-protein transferase inhibitors)

RN 169448-28-6 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-(2-propoxyethyl)-4-(8-quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

RN 169448-43-5 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-butyl-4-(8-quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Habte

<09/25/2002

●3 HCl

RN 169449-21-2 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-butyl-4-(4-quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

RN 169449-27-8 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-(2-methoxyethyl)-4-(8-quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Habte

<09/25/2002

●3 HCl

RN 169449-28-9 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-butyl-4-(5-quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HC1

RN 169449-29-0 CAPLUS

CN 1-Piperazinepropanethiol, .beta.-amino-2-(3-ethoxypropyl)-4-(8-quinolinylcarbonyl)-, trihydrochloride, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● 3 HCl

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ANSWER 30 OF 45 CAPLUS COPYRIGHT 2002 ACS
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ACCESSION NUMBER: 1995:682580 CAPLUS

DOCUMENT NUMBER: 123:83397

TITLE: Analgesic dibenzoxazepines and dibenzothiazepines INVENTOR(S): Hansen, Donald Willis, Jr.; Peterson, Karen Berenice

PATENT ASSIGNEE(S): Searle, G. D., and Co., USA

3

SOURCE: PCT Int. Appl., 189 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO. KIND DATE				A	PPLI	CATI	ON N	0.	DATE							
WO	9429	 286	- -	 A	 1	1994	1222		W	 0 19	 94-U	5602	 9	1994	0602		
		AT,	AU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	ES,	FI,		
		JΡ,	KΡ,	KR,	ΚZ,	LK,	LU,	LV,	MG,	MN,	MW,	NL,	NO,	NZ,	PL,	PT,	RO,
						SK,											
,	R₩:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,
														TD,		•	•
US	5354	747		Α		1994	1011		U	S 19	93-7	9021		1993	0616		
US	5461	047		Α		1995	1024		Ŭ.	s 19	94-2	4534	9	1994	0518		
AU	9471	387		A.	1	1995	0103		A	J 19	94-7	1387		1994	0602		
EP	7039	80		A.	l	1996	0403		E	P 19	94-9	2068	7	1994	0602		
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LI,	LU,	NL.	PT.	SE
JP	0950	0107		T2	2	19970	0107		J.	P 19	94-5	0187	4	1994	0602	•	
PRIORIT	Y APP	LN.	INFO.	. :				Ţ	JS 1	993-	7902	1		1993	0616		
								τ	JS 1	994-	2453	49		1994	0518		
								V	VO 1	994-1	JS602	29		1994	0602		
OTHER S	OURCE	(S):			MAR	PAT :	123:8										

GI

Dibenz[b,f][1,4]oxazepines and dibenz[b,f][1,4]thizepines were disclosed AΒ for the treatment of prostaglandin-E2 mediated diseases. A claimed example compd. is 8-chloro-10,11-dihydro-10-[[4-(phenylmethyl)-1piperazinyl]carbonyl]dibenz[b,f][1,4]oxazepine hydrochloride (I).

ΙT 163839-47-2P RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of dibenz[b,f][1,4]oxazepines analgesics)

Ι

RN163839-47-2 CAPLUS

CN Dibenz[b,f][1,4]oxazepine, 8-chloro-10,11-dihydro-10-[[4-(6quinolinylcarbonyl)-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)

ANSWER 31 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:205963 CAPLUS

123:9468

DOCUMENT NUMBER: TITLE:

2-, 3-, 4-, 5-, 6-, 7-, 8-, 9- and/or 10-substituted dibenzoxazepine and dibenzthiazepine compounds as

Habte

<09/25/2002

> analgesics and prostaglandin E2 antagonists, pharmaceutical compositions and methods of use

INVENTOR(S): Hansen, Donald W., Jr.; Peterson, Karen B. PATENT ASSIGNEE(S): Searle, G. D., and Co., USA

SOURCE: U.S., 39 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

	PA	TENT	NO.		KI	ΝD	DATE			A	PPLI	CATI	ON NO	ο.	DATE			
	US	5354	 747		 A		1994	1011		– Т	s 19	 93-7	 9021		1993	0616		
	US	5461	047		Α		1995	1024		U	s 19	94-2	4534	9	1994	0518		
	WO	9429	286		A.	1	1994	1222		W	0 19	94-U	S602	9	1994	0602		
		W:	ΑT,	ΑU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	ES,	FI,	GB,	HU,
			JP,	KP,	KR,	ΚZ,	LK,	LU,	LV,	MG,	MN,	MW,	NL,	NO,	NZ,	PL,	PT,	RO,
			RU,	SD,	SE,	SI,	SK,	TT,	UA,	US,	UZ,	VN						
		RW:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,
			BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,	NE,	SN,	TD,	TG		
	CA	2165	159		Ā	Ą	1994	1222		Ċ.	A 19	94-2	1651	59	1994	0602		
	AU	9471	387		A.	1	1995	0103		A	U 19	94-7	1387		1994	0602		
	ΕP	7039	80		A.	l	1996	0403		E	P 19	94-9	2068	7	1994	0602		
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LI,	LU,	NL,	PT,	SE
	JΡ	0950	0107		T	2	1997	0107		J	P 19	94-5	0187	4	1994	0602	-	
PRIO	RIT	Y APP	LN.	INFO	. :				1	JS 1	993-	7902	1		1993	0616		
									1	JS 1	994-2	2453	49		1994	0518		
									1	WO 1	994-1	JS60:	29		1994	0602		

OTHER SOURCE(S): MARPAT 123:9468

GΙ

Y

$$A-B$$
 $CH_2)_m$
 $CH_2)_m$
 $CH_2)_m$
 $CH_3)_m$
 $CH_3)_m$
 $CH_3)_m$
 $CH_3)_m$
 $CH_3)_m$
 $CH_3)_m$
 $CH_3)_m$

The present invention provides substituted dibenzoxazepine and AΒ dibenzthiazepine compds. I which are useful as analgesic agents for the treatment of pain, and for prostaglandin-E2 mediated diseases, pharmaceutical compns. comprising a therapeutically-effective amt. of I in

combination with a pharmaceutically-acceptable carrier, a method for

eliminating or ameliorating pain in an animal comprising administering a therapeutically-effective amt. of I to the animal, and a method for treating prostaglandin-E2 mediated diseases in an animal comprising administering a therapeutically-effective amt. of I to the animal. Analgesic activity was measured using the writhing assay at std. dose of 10 mpk/g body wt.: I produced analgesia in from 2/10 to 10/10 of the mice.

Prostaglandin E2 antagonism assay (inhibition of contraction of guinea pig

ileum): dose ratio of EC50 doses of from 0.8 to 32. Pharmaceutical compns. were given.

IT 163839-47-2P, 1[-Chlorodibenz[b,f][1,4]oxazepin-10(11H) yl)carbonyl]-4-[(6-quinolinyl)carbonyl]yl)carbonyl]-4-[(6-quinolinyl)carbonyl]piperazine

RL: SPN (Synthetic preparation); PREP (Preparation)

(substituted dibenzoxazepine and dibenzthiazepine compds. as analgesics $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

and prostaglandin E2 antagonists)

RN 163839-47-2 CAPLUS

CN Dibenz[b,f][1,4]oxazepine, 8-chloro-10,11-dihydro-10-[[4-(6-quinolinylcarbonyl)-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)

L5 ANSWER 32 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1994:244697 CAPLUS

DOCUMENT NUMBER:

120:244697

TITLE:

Preparation of quinoline-2,4-dicarboxylic

acid diamide derivatives as antiphlogistics and

immunosuppressants

INVENTOR(S):

Suzuki, Fumio; Nakazato, Nobusuke; Oomori, Takemori;

Nakajima, Hiroshi

PATENT ASSIGNEE(S):

Kyowa Hakko Kogyo Kk, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 9 pp.

Habte

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

OTHER SOURCE(S):

GI

MARPAT 120:244697

AB The title derivs. I [R1, R2 = H, lower alkyl, aralkyl, (un)substituted aryl; R3 = H, lower alkyl, aryl; R4, R5 = H, halo; n = 2-5; NR1R2 = (un)substituted heterocyclyl], their pharmaceutically acceptable salts, II

[R6, R7 = H, (CH2)nPh, substituted aryl; R8 = H, lower alkyl; R9, R10 = H,

halo; n = 2-5; NR6R7 = (un)substituted heterocyclyl], or their pharmaceutically acceptable salts are prepd. Antiphlogistics and immunosuppressants contg. I, II, or their pharmaceutically acceptable salts as effective components are also claimed. A suspension of quinoline-2,4-dicarboxylic acid in PhMe was treated dropwise with SOC12 and DMF at room temp., refluxed for 2 h, then treated with 3-phenyl-1-propylamine and Et3N at room temp. for 10 h to give 70% N,N'-bis(3-phenylpropyl)quinoline-2,4-dicarboxylic acid diamide. 2,4-Bis[(thiomorpholin-1-yl)carbonyl]quinoline at 100 mg/kg P.O. inhibited 28.0% the carrageenin-induced rat paw edema.

IT 153814-48-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as antiphlogistic and immunosuppressant)

RN 153814-48-3 CAPLUS

CN Piperazine, 1,1'-(2,4-quinolinediyldicarbonyl)bis[4-methyl- (9CI) (CF INDEX NAME)

ANSWER 33 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1991:536644 CAPLUS

DOCUMENT NUMBER:

115:136644

TITLE:

Preparation of heterocyclylhexitols as coronary

vasodilators

INVENTOR(S):

Suzuki, Fumio; Hayashi, Hiroaki; Kuroda, Takeshi;

Kubo, Kazuhiro; Ikeda, Junichi

PATENT ASSIGNEE(S):

Kyowa Hakko Kogyo Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 92 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT N	0.	KIND	DATE		APPLICATION	NO.	DATE
EP 39357	4	A2	19901024		EP 1990-107	245	19900417
EP 39357	4	A 3	19910821				
EP 39357	4	B1	19960131				
R: .	AT, BE,	CH, DE	, DK, ES,	FR, G	B, GR, IT, L	I, LU	, NL, SE
CA 20145	20	AA	19901017		CA 1990-201	4520	19900412
CA 20145	20	С	19960716				
US 50534	08	Α	19911001		US 1990-508	701	19900413
JP 03218	381	A2	19910925		JP 1990-100	005	19900416
JP 29546	47	B2	19990927				
AT 13367	1	E	19960215		AT 1990-107	245	19900417
ES 20852	95	Т3	19960601		ES 1990-107	245	19900417
PRIORITY APPL	N. INFO.	:		JP	1989-97032		19890417
				JP	1989-293125		19891110
OTHER SOURCE (S):	MAI	RPAT 115:1	36644			

GI

Habte

QWXN (CH₂) n
Q1=
$$X^2$$
 X^1
Q1= X^3
 X^4
Q2= X^2
 X^4
 X^1
 X^2
 X^2
 X^4
Q2= X^2
 X^4
 X^1
 X^2
 X^2
 X^4
 X^1
 X^2
 X^2
 X^4
 X^4
 X^1
 X^2
 X^2
 X^4
 X^4
 X^1
 X^2
 X^2
 X^4
 X^4

AΒ Title compds. [I; Q = Q1, Q2, Q3, etc.; X1 = NH, O, S; X2-X4 = CH, N; R1-R4 = H, alkyl, CF3, aryl, alkanoyloxy, amino, alkanoyl, halo, NO2, etc.; R5, R6 = H, alkyl; U = N, N(0); W = bond, O, S; X = (CY1Y2)1, CY3:CY4 = (CY1Y2)1; Y1, Y2 = H, alkyl, OH, alkanoyloxy, cyano, Ph; Y1Y2 =O; Y3, Y4 = H, alkyl; l = 0-6; Z = H, NO2; n = 2, 3], were prepd. Thus, а mixt. of 1,4:3,6-dianhydro-D-glucitol 5-methanesulfonate was refluxed 36 h with piperazine in BuOH to give 5-deoxy-5-piperazin-1-yl-1,4:3,6-dianhydro-L-iditol methanesulfonate. The latter in aq. H2SO4 was added to a -15.degree. mixt. of urea and 86% HNO3 in conc. H2SO4 to give 38% 5-deoxy-5-piperazin-1-yl-1,4:3,6-dianhydro-L-iditol 2-nitrate. The latter was refluxed 24 h with 1-chloro-3-phenylthiopropane and Et3N in EtOH to

give 34% of title compd. II. II at 0.3 mg/kg i.d. was effective against propranolol-induced heart failure in dogs.

134186-14-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as coronary vasodilator)

RN 134186-14-4 CAPLUS

L-Iditol, 1,4:3,6-dianhydro-2-deoxy-2-[4-(3-quinolinylcarbonyl)-1-CN piperazinyl]-, 5-nitrate, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Habte

<09/25/2002

●x HCl

L5 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:35413 CAPLUS

DOCUMENT NUMBER: 114:35413

TITLE: Structure-activity relationship of quinoline

carboxylic acids. A new class of inhibitors of

dihydroorotate dehydrogenase

AUTHOR(S): Chen, Shih Fong; Papp, Lisa M.; Ardecky, Robert J.;

Rao, Ganti V.; Hesson, David P.; Forbes, Martin;

Dexter, Daniel L.

CORPORATE SOURCE: Pharm. Biotechnol. Res. Dev. Div., E. I. Du Pont de

Nemours and Co., Wilmington, DE, 19898, USA

SOURCE: Biochem. Pharmacol. (1990), 40(4), 709-14

CODEN: BCPCA6; ISSN: 0006-2952

DOCUMENT TYPE: Journal LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB The novel anticancer drug candidate brequinar sodium [DuP 785, I] and other quinoline carboxylic acids inhibit dihydroorotate dehydrogenase, the fourth enzyme in the de novo pyrimidine biosynthetic pathway leading to the formation of UMP. Sixty-nine quinoline 4-carboxylic acid analogs were analyzed as inhibitors of L1210 dihydroorotate dehydrogenase. This structure-activity relationship study identified three crit. regions of brequinar sodium and its analogs, where specific substitutions are required for the inhibition of the activity of dihydroorotate dehydrogenase. The three principal regions are (i) the C(2) position where bulky hydrophobic substituents are necessary, (ii)

the

C(4) position which has a strict requirement for the carboxylic acid and its corresponding salts, and (iii) the benzo portion of the **quinoline** ring with appropriate substitutions. These results will be useful in the elucidation of the precise nature of the interaction between brequinar sodium and dihydroorotate dehydrogenase.

IT 130507-56-1

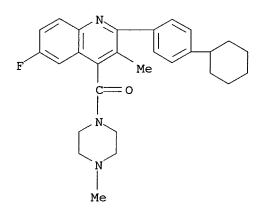
RL: BIOL (Biological study)

(dihydroorotate dehydrogenase inhibition by, antitumor activity of,

structure in relation to)

RN 130507-56-1 CAPLUS

CN Piperazine, 1-[[2-(4-cyclohexylphenyl)-6-fluoro-3-methyl-4-quinolinyl]carbonyl]-4-methyl- (9CI) (CA INDEX NAME)



L5 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1990:532029 CAPLUS

DOCUMENT NUMBER: 113:132029

TITLE: Preparation of quinoline derivatives as

antioxidants

INVENTOR(S): Kuroki, Yoshiaki; Asada, Hideki; Oda, Hiroyuki;

Chihara, Yasuaki; Izumi, Noriyoshi; Shimada, Shuji

PATENT ASSIGNEE(S): Ube Industries, Ltd., Japan; Yoshitomi Pharmaceutical

Industries, Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 02129169 A2 19900517 JP 1988-281830 19881108

OTHER SOURCE(S): MARPAT 113:132029

GI

AB The title compds. I [R1 = H, CO2H, alkoxycarbonyl, etc.; R2 = H, alkoxy, NH2; R3 = alkyl, pyridyl, (substituted) Ph, etc.] and II which inhibit lipid peroxidn. and blood platlet aggregation and are useful as cardiovascular agents, are prepd. A mixt of 4-ethoxycarbonyl-7,8-dihydroxy-2-phenylquinoline and Jones reagent in acetone was stirred for 2

h to give quinoline III. In an in vitro test using rat liver microsomes, III exhibited an IC50 of 17 .mu.M against lipid peroxidn.

RN 129375-84-4 CAPLUS

CN Piperazine, 1-[(7,8-dihydroxy-2-phenyl-4-quinolinyl)carbonyl]-4-phenyl-(9CI) (CA INDEX NAME)

RN 129376-30-3 CAPLUS

Habte

<09/25/2002

CN Piperazine, 1-[(7,8-dihydroxy-2-phenyl-4-quinolinyl)carbonyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1989:625318 CAPLUS

DOCUMENT NUMBER:

111:225318

TITLE:

Preparation of 1,4-disubstituted piperazines and

their

use as antagonists of platelet-activating factor Sugihara, Hirosada; Itoh, Katsumi; Nishikawa, Kohei

INVENTOR(S):
PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

Eur. Pat. Appl., 35 pp.

SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 318235	A2	19890531	EP 1988-311022	19881122
EP 318235	A 3	19910502		
R: AT, BE,	CH, DE	, ES, FR, G	B, GR, IT, LI, LU, NL	, SE
JP 01230570	A2	19890914	JP 1988-295244	19881122
US 4937246	Α	19900626	US 1988-274975	19881122
PRIORITY APPLN. INFO	.:		JP 1987-296887	19871125
GI				

AB The title compds. I [A = (un) substituted Ph, (un) substituted heterocyclyl;

X = CH2, C(:0), C(:S); R1, R2, R3 = lower alkyl] or their salts, a means of their prepn., and compns. contg. them are provided for inhibition of platelet-activating factor (PAF).

1-(3-Methoxy-5-nitro-4-propoxybenzoyl)-

4-(3,4,5-trimethoxybenzyl)piperazine-HCl (II) was prepd. from 1-(3,4,5-trimethoxybenzyl)piperazine dihydrochloride and 3-methoxy-5-nitro-4-propoxy-benzoyl chloride (prepn. given). II (3 .times. 10-5M) completely inhibited PAF-induced aggregation of rabbit platelets; 30 mg II/kg inhibited PAF-induced hypotension in rats.

IT 123947-37-5P 123947-38-6P 123947-46-6P 123947-47-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as inhibitor of platelet-activating factor)

RN 123947-37-5 CAPLUS

CN Piperazine, 1-(2-quinolinylcarbonyl)-4-[(3,4,5-trimethoxyphenyl)methyl](9CI) (CA INDEX NAME)

RN 123947-38-6 CAPLUS

CN Piperazine, 1-(2-quinolinylcarbonyl)-4-[(3,4,5-trimethoxyphenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

$$\begin{array}{c|c} O & O \\ \hline \\ C & N \end{array} \begin{array}{c} O \\ C & O \end{array} \begin{array}{c} O \\ O \end{array}$$

HCl

RN 123947-46-6 CAPLUS

CN Piperazine, 1-(3-quinolinylcarbonyl)-4-[(3,4,5-trimethoxyphenyl)methyl]-(9CI) (CA INDEX NAME)

RN 123947-47-7 CAPLUS

CN Piperazine, 1-(3-quinolinylcarbonyl)-4-[(3,4,5-trimethoxyphenyl)methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

L5 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1989:173062 CAPLUS

DOCUMENT NUMBER:

110:173062

TITLE:

Reactions of thionyl chloride with C-methyl heterocycles. Part 1. The formation of

dichloro(2-quinoly1)methanesulfenyl chlorides from

2-methylquinolines

AUTHOR(S):

Al-Shaar, Adnan H. M.; Gilmour, David W.; Lythgoe, David J.; McClenaghan, Ian; Ramsden, Christopher A.

CORPORATE SOURCE:

Pharm. Res. Cent., Rhone-Poulenc Ltd.,

Dagenham/Essex,

RM10 7XS, UK

SOURCE: J. Chem. Soc., Perkin Trans. 1 (1988), (11), 3019-23

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 110:173062

GΙ

 \mathbb{R}^1 \mathbb{R}^1

AB Hot SOC12 converted 2-methylquinolines, e.g., I (R = Me, R1 = H, C1) into dichloro(2-quinoly1)methanesulfenyl chlorides I (R = CC12SC1), which,

upon

treatment with secondary amines gave thioamides I (R = CSR1; R1 = 4-methylpiperazin-1-yl, N-methylanilino, NEt2, morpholino]. Reaction of

I (R = CC12SC1, R1 = H) with amidines gave quinolylthiadiazoles II (R = H, Me, Ph, Et, CH2Ph, CC13, NMe2, SMe, etc.).

IT 120095-83-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 120095-83-2 CAPLUS

CN Piperazine, 1-methyl-4-(2-quinolinylthioxomethyl)- (9CI) (CA INDEX NAME)

 $\begin{array}{c|c} S \\ \hline \\ C \\ \hline \\ N \\ \\ Me \end{array}$

L5 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1987:102057 CAPLUS

DOCUMENT NUMBER: 106:102057

TITLE: Studies on positive inotropic agents. II. Synthesis

of

[(4-substituted 1-piperazinyl)carbonyl]-2(1H)-

quinolinone derivatives

AUTHOR(S): Tominaga, Michiaki; Yo, Eiyu; Ogawa, Hidenori;

Yamashita, Shuji; Yabuuchi, Youichi; Nakagawa,

Kazuyuki

CORPORATE SOURCE: Tokushima Res. Inst., Otsuka Pharm. Co., Ltd.,

Tokushima, 771-01, Japan

SOURCE: Chem. Pharm. Bull. (1986), 34(2), 682-93

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 106:102057

GΙ

AB (1-Piperazinylcarbonyl)quinolinones, e.g., I [R = (CH2)nBz (n = 2,3), Ph, Pr, (CH2)2OPh] were synthesized and examd. for pos. inotropic activity on the canine heart. Among them, I [R = (CH2)nBz (n = 2,3) had potent activity.

IT 83735-61-9P 83748-36-1P 88463-87-0P 91300-91-3P 91300-96-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and alkylation of)

RN 83735-61-9 CAPLUS

CN Piperazine, 1-[(1,2-dihydro-2-oxo-5-quinolinyl)carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 83748-36-1 CAPLUS

CN Piperazine, 1-[(1,2-dihydro-2-oxo-6-quinolinyl)carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN

88463-87-0 CAPLUS
Piperazine, 1-[(1,2-dihydro-2-oxo-8-quinolinyl)carbonyl]-,
monohydrochloride (9CI) (CA INDEX NAME) CN

HCl

91300-91-3 CAPLUS RN

Piperazine, 1-[(1,2-dihydro-2-oxo-4-quinolinyl)carbonyl]-, CNmonohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 91300-96-8 CAPLUS
CN Piperazine, 1-[(1,2-dihydro-2-oxo-3-quinolinyl)carbonyl]-,
monohydrochloride (9CI) (CA INDEX NAME)

● HCl

<09/25/2002

Habte

● HCl

RN 83735-59-5 CAPLUS
CN Piperazine,
1-[(1,2-dihydro-2-oxo-5-quinolinyl)carbonyl]-4-(phenylmethyl) , monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 83748-37-2 CAPLUS
CN Piperazine,
1-[(1,2-dihydro-2-oxo-6-quinolinyl)carbonyl]-4-(phenylmethyl) , monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ Ph-CH_2 & & \\ \end{array}$$

● HCl

RN 91300-89-9 CAPLUS
CN Piperazine,
1-[(1,2-dihydro-2-oxo-4-quinolinyl)carbonyl]-4-(phenylmethyl) , monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 91300-90-2 CAPLUS
CN Piperazine,
1-[(1,2-dihydro-2-oxo-3-quinolinyl)carbonyl]-4-(phenylmethyl) , monohydrochloride (9CI) (CA INDEX NAME)

Page 166 09/910,141

● HCl

IT 83735-49-3P 106752-36-7P 106752-37-8P 106752-38-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

RN

(prepn. and inotropic activity of)
83735-49-3 CAPLUS
Piperazine, 1-[(1,2-dihydro-2-oxo-8-quinolinyl)carbonyl]-4-(3-oxo-3-CN phenylpropyl) - (9CI) (CA INDEX NAME)

RN106752-36-7 CAPLUS

CN Piperazine,

1-[(1,2-dihydro-2-oxo-6-quinolinyl)carbonyl]-4-(phenylmethyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ \text{Ph-CH}_2 & & \\ \end{array}$$

<09/25/2002 Habte

RN

106752-37-8 CAPLUS Piperazine, 1-[(1,2-dihydro-2-oxo-3-quinolinyl)carbonyl]-4-(2-CN methylpropyl) - (9CI) (CA INDEX NAME)

RN 106752-38-9 CAPLUS

CN Piperazine, 1-[(1,2-dihydro-2-oxo-5-quinolinyl)carbonyl]-4-(3-oxo-3phenylpropyl) - (9CI) (CA INDEX NAME)

IT 83735-34-6P 83735-36-8P 83735-39-1P 83735-40-4P 83735-41-5P 83735-48-2P 83748-39-4P 88463-83-6P 91300-92-4P 91300-93-5P 91300-94-6P 91300-97-9P 91300-98-0P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) RN 83735-34-6 CAPLUS Piperazine, 1-[(1,2-dihydro-2-oxo-6-quinolinyl)carbonyl]-4-(3-CN phenylpropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

09/910,141

● HCl

RN 83735-36-8 CAPLUS

CN Piperazine, 1-[(1,2-dihydro-2-oxo-6-quinolinyl)carbonyl]-4-(2-methylpropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Page 168

● HCl

RN 83735-39-1 CAPLUS

CN Piperazine, 1-[(1,2-dihydro-2-oxo-5-quinolinyl)carbonyl]-4-(2-methylpropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN

83735-40-4 CAPLUS
Piperazine, 1-[(1,2-dihydro-2-oxo-5-quinolinyl)carbonyl]-4-(2-CN phenoxyethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 83735-41-5 CAPLUS

Piperazine, 1-[(1,2-dihydro-2-oxo-5-quinolinyl)carbonyl]-4-(3-oxo-3-phenylpropyl)-, monohydrochloride (9CI) (CA INDEX NAME) CN

HCl

RN

83735-48-2 CAPLUS
Piperazine, 1-[(1,2-dihydro-2-oxo-8-quinolinyl)carbonyl]-4-(2-CN methylpropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN

83748-39-4 CAPLUS
Piperazine, 1-[(1,2-dihydro-2-oxo-6-quinolinyl)carbonyl]-4-(2-CN phenoxyethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Page 171 09/910,141

$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ \text{PhO-CH}_2\text{-CH}_2 \end{array}$$

● HCl

RN

88463-83-6 CAPLUS
Piperazine, 1-[(1,2-dihydro-2-oxo-8-quinolinyl)carbonyl]-4-(3-oxo-3-CNphenylpropyl) -, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN91300-92-4 CAPLUS

CN Piperazine, 1-[(1,2-dihydro-2-oxo-4-quinolinyl)carbonyl]-4-(3-oxo-3phenylpropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

<09/25/2002 Habte

09/910,141

HCl

RN 91300-93-5 CAPLUS
CN Piperazine, 1-[(1,2-dihydro-2-oxo-4-quinolinyl)carbonyl]-4-(2-methylpropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Page 172

HCl

RN 91300-94-6 CAPLUS
CN Piperazine, 1-[(1,2-dihydro-2-oxo-4-quinolinyl)carbonyl]-4-(2-phenoxyethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN

91300-97-9 CAPLUS
Piperazine, 1-[(1,2-dihydro-2-oxo-3-quinolinyl)carbonyl]-4-(2-CN phenoxyethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
H & O \\
C & N
\end{array}$$

$$\begin{array}{c|c}
CH_2-CH_2-OPh \\
C & N
\end{array}$$

HCl

RN91300-98-0 CAPLUS

Piperazine, 1-[(1,2-dihydro-2-oxo-3-quinolinyl)carbonyl]-4-(2-CN methylpropyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

Habte

<09/25/2002

L5 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1984:591716 CAPLUS

DOCUMENT NUMBER:

TITLE:

101:191716

4-Quinolinecarboxamide derivatives

INVENTOR(S):

Dubroeucq, Marie Christine; Le Fur, Gerard; Renault,

Christian

PATENT ASSIGNEE(S): SOURCE:

Rhone-Poulenc Sante, Fr. Eur. Pat. Appl., 47 pp.

CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE:

Patent French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 112776 EP 112776 EP 112776			EP 1983-402501	19831221
R: AT, BE			IT, LI, LU, NL, SE	
FR 2538388	A1		FR 1982-21758	19821224
FR 2538388		19850621		
	E		AT 1983-402501	19831221
			AU 1983-22776	19831222
AU 575797	В2	19880811		
ZA 8309576	Α	19840829	ZA 1983-9576	19831222
HU 33119	0	19841029	HU 1983-4425	19831222
HU 191745	В	19870428		
JP 59219260	A2	19841210	JP 1983-243082	19831222
IL 70528	A1	19870130	IL 1983-70528	19831222
US 4711890	Α	19871208	US 1983-564322	19831222
DK 8305964	Α	19840625	DK 1983-5964	19831223
NO 8304798	Α	19840625	NO 1983-4798	19831223
ES 528364	A1	19850101	ES 1983-528364	19831223
SU 1255050	A3	19860830	SU 1983-3682598	19831223
CA 1225992	A 1	19870825	CA 1983-444273	19831223
US 4684652	Α	19870804	US 1985-763660	19850808
CA 1228548	A2	19871027	CA 1986-526560	19861230
PRIORITY APPLN. INF	o.:		FR 1982-21758	19821224
			EP 1983-402501	19831221
			US 1983-564322	19831222
			CA 1983-444273	19831223
OMITTED GOTTEGE (G)	~ ~ ~	ADDA 00 101	101716	

OTHER SOURCE(S): CASREACT 101:191716

GΙ

$$\begin{array}{c|c} R^3 & CONR^1R^2 \\ \hline & Z^1 \\ \hline & Z^4 & I \end{array}$$

AB Amides I [Z and Zl are N, CH; R = Ph, pyridyl, thienyl, 2-thiazolyl, halo-, alkoxy-, alkyl-, alkylthio-, nitro-, or (trifluoromethyl)phenyl; R1

and R2 are alkyl, Ph, cycloalkyl, phenylalkyl, cycloalkylalkyl, alkenyl, alkynyl, or R2 = 4-piperidinyl, (4-piperidinyl)alkyl, or NR1R2 form a heterocycle; R3 and R4 are H, halo, alkyl, alkoxy, NO2, CF3] were prepd., and they showed tranquilizer activity. 2-Phenyl-4-

quinolinecarboxylic acid was treated with SOC12 and Et2NH to give I (Z = N, R = Ph, Z1 = CH, R1 = R2 = Et, R3 = R4 = H).

IT 63591-81-1P 92566-49-9P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 63591-81-1 CAPLUS

CN Piperazine, 1-[(2-phenyl-4-quinolinyl)carbonyl]- (9CI) (CA INDEX NAME)

RN 92566-49-9 CAPLUS

CN Piperazine, 1-[(2-phenyl-4-quinolinyl)carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Habte

●2 HCl

L5 ANSWER 40 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1984:407051 CAPLUS

DOCUMENT NUMBER: 101:7051

TITLE: 2-Substituted 4-amino-6,7-dimethoxyquinolines

INVENTOR(S): Campbell, Simon Fraser; Hardstone, John David

PATENT ASSIGNEE(S): Pfizer Ltd., UK; Pfizer Corp.

SOURCE: Eur. Pat. Appl., 51 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT NO.		KIND	DATE		AP	PLICATION NO.	DATE
	100200 100200		A1 B1	19840208 19870506		EP	1983-304196	19830720
	R: AT,	BE,	CH, DE,	FR, GB,	IT,	LI,	LU, NL, SE	
US 4	4656174		Α	19870407		US	1983-515095	19830719
AT 2	26978		E	19870515		AT.	1983-304196	19830720
FI	8302658		Α	19840125		FI	1983-2658	19830721
FI '	78296		В	19890331				
FI	78296		С	19890710				
ES S	524320		A1	19850416		ES	1983-524320	19830721
PL :	139498		B1	19870131		PL	1983-243131	19830721
DK 8	8303373		Α	19840125		DK	1983-3373	19830722
DK :	166821		B1	19930719				
NO	8302688		Α	19840125		ИО	1983-2688	19830722
NO :	171594		В	19921228				
NO :	171594		С	19930407				
AU 8	8317222		A1	19840126		AU	1983-17222	19830722
AU S	548036		B2	19851121				
JP S	59033264		A2	19840223		JP	1983-134244	19830722
JP (02019112		B4	19900427				

ни 31688 ни 190907	O B	19840528 19861228		HU	1983-2594	19830722
ZA 8305355	A	19840530		7. A	1983-5355	19830722
DD 211555	A5	19840718		DD	1983-253330	19830722
SU 1251801	A3	19860815		SU	1983-3618703	19830722
CS 247073	B2	19861113		CS	1983-5509	19830722
IL 69311	A 1	19870130		IL	1983-69311	19830722
CA 1255670	A1	19890613		CA	1983-433023	19830722
SU 1340589	A 3	19870923		SU	1984-3732816	19840426
US 4686228	Α	19870811		US	1986-925029	19861030
US 4758568	Α	19880719		US	1987-48343	19870511
NO 9003181	A	19840125		NO	1990-3181	19900717
NO 173605	В	19930927				
NO 173605	С	19940105				
PRIORITY APPLN. INFO.:			GB	198	32-21457	19820724
			US	198	33-515095	19830719
			EP	198	33-304196	19830720
			ИО	198	33-2688	19830722
			US	198	36-925029	19861030

GΙ

AB Antihypertensive (no data) aminodimethoxyquinolines I (R = tertiary amino)

were prepd. Thus the aniline II (R1 = NH2) was treated with MeC(OEt)3 to give II (R1 = N:CMeOEt) which was treated with N-benzylpiperazine to give II [R1 = 1-(4-benzylpiperazino)ethylideneamino, III]. Cyclization of III with ZnCl2 gave I (R = 4-benzylpiperazino) which was hydrogenolyzed to I (R = piperazino). Acylation of I (R = piperazino) with 1,4-benzodioxan-2-carbonyl chloride gave I [R = 4-(1,4-benzodioxan-2-ylcarbonyl)piperazino].

IT 90402-04-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 90402-04-3 CAPLUS

CN Piperazine, 1-(4-amino-6,7-dimethoxy-2-quinolinyl)-4-(2-quinolinylcarbonyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

ANSWER 41 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1983:34511 CAPLUS

DOCUMENT NUMBER:

98:34511

TITLE:

Dichloroquinoline derivatives and their use in

herbicidal compositions

INVENTOR(S):

Hagen, Helmut; Markert, Juergen; Wuerzer, Bruno

PATENT ASSIGNEE(S):

BASF A.-G. , Fed. Rep. Ger.

SOURCE:

Ger. Offen., 41 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PA:	TENT NO.		KIND	DATE		APPLICATION NO. DATE	
DE	3108873		A1	19820916		DE 1981-3108873 198103	309
US	4497651		Α	19850205		US 1982-349675 19820	217
IL	65052		A1	19850830		IL 1982-65052 198202	218
CA	1202026		A 1	19860318		CA 1982-396575 198202	218
EP	60429		A1	19820922		EP 1982-101534 198202	227
EP	60429		В1	19840125			
	R: AT,	BE,	CH, DE	, FR, GB,	IT,	LU, NL, SE	
ΑT	5964		E	19840215		AT 1982-101534 19820	227
DD	201559		С	19830727		DD 1982-237883 198203	304
JP	57165368		A2	19821012		JP 1982-34124 198203	305
JP	02016298		B4	19900416			
DK	8200993		Α	19820910		DK 1982-993 198203	308
DK	159879		В	19901224			
DK	159879		С	19910513			
BR	8201241		Α	19830118		BR 1982-1241 198203	308
zA	8201503		Α	19830223		ZA 1982-1503 198203	308
HU	28279		0	19831228		HU 1982-710 198203	308

HU 188783	В	19860528		
CS 227042	P	19840416	CS 1982-1572	19820308
AU 8281214	A1	19820916	AU 1982-81214	19820309
AU 544877	B2	19850620		
US 4632696	A	19861230	US 1984-686747	19841227
PRIORITY APPLN. INFO.:			DE 1981-3108873	19810309
			US 1982-349675	19820217
			EP 1982-101534	19820227

OTHER SOURCE(S):

CASREACT 98:34511

GI

- AB I [R = 5-, 6-, or 7-Cl, X = H2, O, S, NOH, NAQ [A = bond or CH2, Q = (un)substituted Ph or pyridyl]; R1 = H, halo, cyano, (un)substituted amino, CO2H, OM (M = metal), etc.] were prepd. as herbicides (no data). Thus, radical chlorination of 7-chloro-8-methylquinoline gave II, which, e.g., with Et2NH gave III.
- RL: AGR (Agricultural use); BAC (Biological activity or effector, except
 adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP
 (Preparation); USES (Uses)

(prepn. of, as herbicide)

- RN 84087-21-8 CAPLUS
- CN Piperazine, 1-[(3,7-dichloro-8-quinolinyl)carbonyl]-4-methyl- (9CI) (CA INDEX NAME)

ANSWER 42 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1982:26369 CAPLUS

DOCUMENT NUMBER: 96:26369

TITLE: Copper-plating electrolyte

INVENTOR(S): Milushkin, A. S.; Abramochkin, E. S.

PATENT ASSIGNEE(S): Kaliningrad State University, USSR; Kirov Polytechnic

Institute

SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy,

Tovarnye Znaki 1981, (31), 140-1.

CODEN: URXXAF

DOCUMENT TYPE: Patent LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE A1 19810823 SU 1979-2853366 19791217 The porosity of Cu plates was decreased by adding 0.001-0.05 mol

AB substituted 2,3-polymethylenequinoline-4-carboxylic acid amides to a bath contg. CuSO4 180-240, H2SO4 60-80, Na2SO4 10-25, and

polyethylenepolyamine

 $3-5\ \text{g/L}$ in H2O. The bath can contain N-phenylpiperazide of 2,3-pentamethylenequinoline-4-carboxylic acid [36063-64-6] or N-diethylaminoethylamide of 6-methyl-2,3-tetramethylenequinoline-4carboxylic acid [80039-84-5].

IT 36063-64-6

RL: PRP (Properties)

(in electroplating, of copper, porosity decrease in relation to)

RN

36063-64-6 CAPLUS
Piperazine, 1-phenyl-4-[(7,8,9,10-tetrahydro-6H-cyclohepta[b]quinolin-11-CN yl)carbonyl]- (9CI) (CA INDEX NAME)

ANSWER 43 OF 45 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1980:146914 CAPLUS

DOCUMENT NUMBER:

92:146914

TITLE:

2-[4-(Quinolinecarbonyl)piperazino]-4-amino-

6,7-dimethoxyquinazolines

INVENTOR(S):

Maruyama, Isamu; Aono, Shunji; Katsube, Junki

PATENT ASSIGNEE(S):

Sumitomo Chemical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54128582	A2	19791005	JP 1978-37603	19780330
JP 62041232	B4	19870902		

GΙ

Habte

AB Antihypertensive (no data) title compds. I (2-, 3-, and 4-substituted) were prepd. by reaction of II with III or by reaction of IV with V.

Thus,

refluxing II with III (4-substituted) in BuOH 10 h gave I (4-substituted) (yield not given).

IT 73242-39-4P

RN 73242-39-4 CAPLUS

CN Piperazine, 1-(4-amino-6,7-dimethoxy-2-quinazolinyl)-4-(4-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)

IT 73242-38-3

RL: RCT (Reactant)

(reaction with chloroquinazolines)

RN

73242-38-3 CAPLUS
Piperazine, 1-(4-quinolinylcarbonyl)- (9CI) (CA INDEX NAME) CN

ANSWER 44 OF 45 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1977:468114 CAPLUS

DOCUMENT NUMBER: 87:68114

TITLE: Synthesis of some quinoline derivatives of

potential antiamebic activity

Ibrahim, El-Sebai A.; Chaaban, I.; El-Khawass, S. M. Fac. Pharm., Univ. Alexandria, Alexandria, Egypt Pharmazie (1977), 32(3), 155-6 AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

CODEN: PHARAT

DOCUMENT TYPE: Journal LANGUAGE: English

GI

AB Esters I (R, R1 given; H, H; Me, H; Cl, H; Ph, H; H, Cl) were prepd. in 70-80% yield by reaction of diloxanide with the corresponding cinchoninic acid chloride. Amides II (R = H, CH2COCHCl2, 4-dichloroacetyl-1-piperazinyl, Ph) were prepd. by reaction of a cinchoninate ester with piperazine followed by reaction of the piperazine amide with Cl2CHCOCl.

II

RN 63591-75-3 CAPLUS

CN Piperazine, 1-(dichloroacetyl)-4-(4-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)

RN 63591-76-4 CAPLUS

CN Piperazine, 1-(dichloroacetyl)-4-[[2-(3,3-dichloro-2-oxopropyl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN

63591-77-5 CAPLUS
Piperazine, 1-(dichloroacetyl)-4-[4-[[4-(dichloroacetyl)-1-CN piperazinyl]carbonyl]-2-quinolinyl]- (9CI) (CA INDEX NAME)

RN

63591-78-6 CAPLUS
Piperazine, 1-(dichloroacetyl)-4-[(2-phenyl-4-quinolinyl)carbonyl]- (9CI) CN (CA INDEX NAME)

<09/25/2002 Habte

RN 63591-79-7 CAPLUS CN Piperazine, 1-[(2-methyl-4-quinolinyl)carbonyl]- (9CI) (CA INDEX NAME)

RN 63591-80-0 CAPLUS
CN Piperazine, 1-[[2-(1-piperazinyl)-4-quinolinyl]carbonyl]- (9CI) (CA
INDEX
NAME)

09/910,141

RN 63591-81-1 CAPLUS

CN Piperazine, 1-[(2-phenyl-4-quinolinyl)carbonyl]- (9CI) (CA INDEX NAME)

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RN 63591-84-4 CAPLUS

CN Piperazine, 1-benzoyl-4-(4-quinolinylcarbonyl)- (9CI) (CA INDEX NAME)

Habte

<09/25/2002

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L5
     ANSWER 45 OF 45 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                        1968:59611 CAPLUS
                        68:59611
DOCUMENT NUMBER:
                        1-Acyl-4-aminoalkylpiperazines
TITLE:
                        Tomcufcik, Andrew S.; Hoffman, Arlene M.
INVENTOR(S):
                        American Cyanamid Co.
PATENT ASSIGNEE(S):
SOURCE:
                        U.S., 5 pp.
                        CODEN: USXXAM
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO. KIND DATE
                                        APPLICATION NO. DATE
     ______
                                         _____
                           19670718
     US 3331830
                                          US
                                                          19630404
GI
     For diagram(s), see printed CA Issue.
     I are active in inhibiting the growth of protozoa of the genus
AB
Trypanosoma
    which causes sleeping sickness disease in man and animals. They are
     prepd. by treating an acyl halide with a 1-substituted
    methylaminopropylpiperazine or an N-acylpiperazine with an
     .omega.-substituted methylaminopropylhalide. Thus, to a soln. of 20.7 g.
     1-(3-dimethylaminopropyl)piperazine.cntdot.3HBrin 150 ml. N NaOH, 11.6
ml.
    BzCl and 270 ml. N NaOH were added dropwise at 0-5.degree., stirred 1.5
    hrs. to give 66% 1-benzoyl-4-(3-dimethylaminopropyl)-
    piperazine.cntdot.2HCl, m. 274-8.degree. (decompn.) (MeOH). Similary
    prepd. were I (R, salt, and m.p. given): 3,4,5-(MeO)3C6H2, 2HCl,
     263-5.degree.; PhCH2O, 2HCl, 218-19.degree.; 2,4-Cl2C6H3, 2HCl,
    265-70.degree.; 2-furyl, 2HCl, 268.degree.; 2-phenyl-2H-1,2,3-triazol-4-
    yl, dimaleate, 176-7.degree.; OC8H17, 2HCl, 258-9.degree.; CCl3, 2HCl,
     240-5.degree.; 2,4-C12C6H3OCH2, 2HCl, 242-3.degree.; 4-IC6H4, dimaleate,
     170-1.degree.; 4-PhN2C6H4, dimaleate, 188-90.degree.; 4-biphenyl,
    dimaleate, 194-6.degree.; 6-quinoline, dimaleate, 167-9.degree.;
    2-phenylcyclopropyl, 2HCl, 225-6.degree.; 2H-2-(2,4-dinitrophenyl)-1,2,3-
    triiazol-4-yl, -, 89-92.degree.; PhCH:CH, dimaleate, 179-80.degree.;
    3-CF3C6H4, 2HCl, 283.degree.; 5-nitro-2-thienyl, 2HCl, 282-3.degree.;
    2,3,6-Cl3C6H2, 2HCl, 270.degree.; 5-nitro-2-furyl, 2HCl, 250-5.degree.;
    9,10-anthraquinon-2-yl, 2HCl, 296.degree., and benzofuroxan-5-yl,
    dimaleate, m. 198-200.degree..
IT
    17699-04-6P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
RN
    17699-04-6 CAPLUS
    Piperazine, 1-[3-(dimethylamino)propyl]-4-(6-quinolylcarbonyl)-, maleate
     (1:2) (8CI) (CA INDEX NAME)
    CM
         1
    CRN 47369-54-0
    CMF C19 H26 N4 O
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$$N = C$$

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

=> log y COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	200.72	341.21
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY -27.88	TOTAL SESSION -27.88
STN INTERNATIONAL LOGOFF AT 15:16:14 ON 25 S	SEP 2002	_